

**CITY OF TEMECULA
DEPARTMENT OF PUBLIC WORKS**

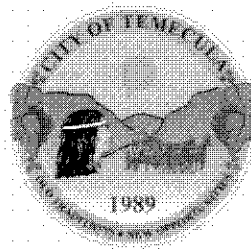


“ENGINEERING AND CONSTRUCTION MANUAL”

for

**ADMINISTRATIVE AND TECHNICAL PROCEDURES FOR
CONSTRUCTION, GRADING AND ENCROACHMENT**

(Ordinance Nos. 04-04, 08-09 & 13-01 adopted 5/11/04, 8/26/09 and 1/22/13)



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Chapter 1 - GENERAL PROVISIONS

1

This Manual sets forth the administrative procedures and technical requirements necessary to implement the provisions of Title 18 entitled "Construction, Grading and Encroachment" of the Temecula Municipal Code. By informing the public of these applicable administrative and technical procedures, the City shall ensure public compliance with City and engineering standards. This Manual also provides guidance to achieving the City of Temecula's Department of Public Works' Land Development Division's mission, which is *"to safeguard the interest of the general public and property owners by promoting informed and sound decision making at neighborhood, local and regional levels."*

1-1 AUTHORITY

Section 18.01.040 "*Engineering and Construction Manual*" of the City of Temecula Municipal Code (hereinafter referred to as "*the Code*") authorizes the City Engineer to formulate, change, update or revise such rules, procedures and interpretations as may be necessary to administer the Code. Such rules, procedures, interpretations and amendments thereto shall be referred to as the "City of Temecula Engineering and Construction Manual for Administrative and Technical Procedures for Construction, Grading and Encroachment" (hereinafter referred to as "*this Manual*").

1-2 PURPOSE

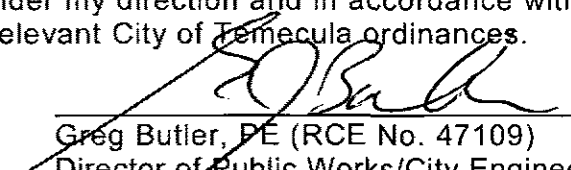
The purpose of this Manual is to assist users of the Code by supplementing it with detailed information regarding rules, procedures, interpretations, standard drawings, specifications, requirements, forms and other information applicable to control construction, grading (excavation, land clearing, erosion and sediment control, etc.) and encroachment within on-site (private) development and public right-of-way in the City of Temecula. The chapters in this Manual are, for the most part, organized to include the contents of the chapters and sections in the Code. Should any portion of this Manual be found in conflict with the provision of the Code or the California Building Code, the more restrictive provision shall govern, unless otherwise approved by the City Engineer.

1-3 ADOPTION AND REVISION

The provisions of this Manual, including revisions and additions thereto, shall be prepared by the City Engineer and shall become effective upon his approval.

1-4 CITY ENGINEER'S STATEMENT

The following Manual was prepared under my direction and in accordance with Title 18 of the Temecula Municipal Code and relevant City of Temecula ordinances.



Greg Butler, PE (RCE No. 47109)
Director of Public Works/City Engineer

Chapter 2 – NOT USED

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Chapter 3 – DEFINITIONS OF TERMS & ABBREVIATIONS

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Most significant terms in this Manual are defined in Title 18 of the Temecula Municipal Code and the Construction, Grading and Encroachment Ordinance. This chapter clarifies specific definitions, as appropriate, and defines terms not previously identified. It also identifies abbreviations used throughout this Manual. Refer to the Temecula Municipal Code, Title 18, Chapter 18.03 "Definitions of Terms & Abbreviations."

3-1 DEFINITIONS

A. Private Development. The following definitions are being clarified and/or added to:

Grading – shall mean any process of excavation or filling or combination thereof; more specifically, the construction activities involving the excavation and re-use (or disposal) of material and the placement of suitable re-usable soils and soil imported to the site necessary to complete all construction activities including excavation, backfill, soil conditioning, compaction and satisfactory drainage.

Grading Permit – shall mean the authorization needed to perform construction/grading within private development. This permit is required if grading within City limits, with the exceptions noted in Section 18.06.060 "Permit Exemptions" of the Code. Note that there is only one grading permit processed per project site. The City Engineer shall modify the permit accordingly, as the work progresses from a specific type of grading to another (from mass to rough to precise grading, etc.).

Grading Plan – shall mean a plan/drawing of the applicant's construction site showing existing and proposed topography, drainage, environmental constraints, easements, demolition and improvements to the land. The plan is to be submitted to the City for review and approval prior to obtaining a grading permit. Various types of grading plans, which may be submitted, include: mass, rough, precise and borrow site/stockpiling grading plans.

Haul Route – shall mean the route(s) upon which vehicles transporting excavation materials shall travel.

Haul Route Permit – shall mean the authorization needed to move soil or construction material on public roadways to or from a grading site.

Ordinance – shall mean Title 18 entitled "Construction, Grading and Encroachment" of the Temecula Municipal Code.

Onsite Development – shall mean development occurring on private property.

B. Public Rights-of-Way. The following definitions are being clarified and/or added to:

Blanket Permit – shall mean a permit that covers a wide array of work at a project site.

Construction Plan - shall mean a plan/drawing of the applicant's construction site showing existing and proposed topography, drainage, easements and improvements to the land. The plan is to be submitted to the City for review and approval of public improvements, prior to obtaining an encroachment permit. Various types of construction plans, which may be

submitted, include: offsite/public, street, storm drain, sewer and/or water, dry utility, traffic control plans, traffic signing & striping and traffic signal improvements.

Curb Core – shall mean the coring of concrete curbs within public right-of-way for proper drainage.

Driveway Approach – shall mean the sloped access part of the driveway between curb returns that is within public right-of-way.

Encroachment - shall mean entering and/or using any public rights-of-way in such a manner as to prevent, obstruct or interfere temporarily or permanently with the normal use of that public rights-of-way; going upon, over or under any public rights-of-way; placing any facilities upon, along, across, over or under any public rights-of-way; or in any other manner utilizing, modifying, disturbing or performing any work in any public rights-of-way.

Encroachment Permit - shall mean the authorization needed to allow a private party: (a) to perform, construct and/or maintain some type of public/private improvement/utility within public rights-of-way or a public easement; and/or (b) to obtain legal encroachment within public rights-of-way or road closures for other events (non-construction related). Note that there is only one encroachment permit processed per project site.

Road Closure – shall mean a temporary closure/restriction in the road due to necessary road repairs and/or events that need to take place while the road is closed.

Utility Maintenance – shall mean the necessary routine maintenance associated with utilities such as wet utility line cleaning, manhole rehabilitation, TV cable inspections, acceptance testing, epoxy coatings, dry utility line cleaning, repairs, etc.

Utility Trenching – shall mean the trenching of roads for utility purposes. Trench repairs shall be performed per City and engineering standards.

3-2 **ABBREVIATIONS**

The following abbreviations are used throughout this Manual.

Act.....	Alquist-Priolo Earthquake Fault Zoning Act
ADA.....	Americans with Disability Act
BMP.....	Best Management Practices
Cal OSHA.....	California Occupational Safety and Health Administration
CASQA.....	California Stormwater Quality Association
CBC.....	California Building Code
CGP.....	Construction General Permit
CR&R.....	the City's franchised solid waste hauler
CUP.....	Conditional Use Permit
EMWD.....	Eastern Municipal Water District
ESC.....	Erosion & Sediment Control
MEP.....	Maximum Extent Practicable
MGP.....	Mass Grading Plan
MS4.....	Municipal Separate Storm Sewer System
MUTCD.....	Manual on Uniform Traffic Control Devices (2012)
NOI.....	Notice of Intent
NPDES.....	National Pollutant Discharge Elimination System
PGP.....	Precise Grading Plan
QSD/P.....	Qualified Stormwater Developer/Practitioner
RCWD.....	Rancho California Water District
RCFC&WCD.....	Riverside County Flood Control & Water Conservation District
RGP.....	Rough Grading Plan
R/W.....	Rights-of-Way
SCAQMD.....	South Coast Air Quality Management District

SHMA/R.....	Seismic Hazard Mapping Act/Regulations
SWPPP.....	Storm Water Pollution Prevention Plan
SWRCB.....	State Water Resource Control Board
TLMA.....	Riverside County's Transportation and Land Management Agency/Planning Division
WDID.....	Water Discharge Identification
WQMP.....	Water Quality Management Plan

Chapter 4 – NOT USED

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Chapter 5 – NOT USED

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Chapter 6 – GRADING PERMIT, APPLICATION & REQUIREMENTS

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A grading permit may be required prior to commencement of any construction and grading within City limits for any onsite development. This chapter covers the types of work that may require a grading permit, the permit application process, all required submittal items including clearances, reports, data/studies and the requirements for disposal of materials. Refer to the Temecula Municipal Code, Title 18, Chapter 18.06 "Grading Permit, Application & Requirements."

6-1 GRADING PERMIT

The following types of work may be covered under a grading permit, if applicable. Note that permit exemptions are identified in Section 18.06.060 "Permit Exemptions" of the Code.

A. Onsite/General Grading.

1. Mass and Rough Grading. A Mass Grading Plan (MGP) is a grading plan that is completed on a large scale over a large area prior to rough grading. When completed, the mass grading will be within two feet (vertical) of the site's final elevations. A Rough Grading Plan (RGP) is a grading plan that shall include details necessary to achieve finished elevations, interim building pad elevations and drainage. Listed below are requirements associated with both a MGP and a RGP.
 - a. The Tentative Map or a Conditional Use Permit (CUP) must be approved prior to acceptance of the grading plan submittal.
 - b. A Notice of Intent (NOI) with a Water Discharge Identification (WDID) number is required prior to approval of the grading plan.
 - c. If the proposed grading extends beyond property limits, a "Letter of Permission to Grade" (per an approved form) from each adjacent property owner is required prior to approval of the grading plan.
 - d. If applicable, submit a dust control plan to the South Coast Air Quality Management District (SCAQMD) in accordance with Section 6-3 B.6 of this chapter.
 - e. For RGPs, all other submittals required by the approved (final) Conditions of Approval (final map, street, storm drain, etc.) must also be submitted prior to acceptance of the grading plan submittal.
2. Precise Grading. A Precise Grading Plan (PGP) is a detailed grading plan that shall include precise locations of structures, finished elevations, drainage details and all on-site improvements on a given property. This plan is required for: commercial/industrial development, tract subdivision development and custom single residential lots. Note that any paving associated with onsite development such as for parking lots and private streets shall be shown on the PGP and shall be covered under the grading permit for the site. Listed below are requirements associated with a PGP.
 - a. For Commercial/Industrial Development.
 - i. The applicable Planning Application must be approved prior to acceptance of the grading plan submittal.
 - ii. Same as Section 6-1 A.1.b (NOI).

- iii. Same as Section 6-1 A.1.c (Permission to Grade letter).
- iv. The Gross Property Boundary Closure Calculations are to be calculated by a Registered Civil Engineer or Land Surveyor. The acreage should include right-of-way fronting property.
- b. For Tract Subdivision Development.
 - i. For a Model Home Complex and/or a Temporary Sales Trailer submittal, the applicable Planning Application must be substantially complete prior to acceptance of the grading plan submittal.
 - ii. For all other tract home submittals, the applicable Product Review Planning Application must be approved and the Final Map must be submitted for plan check prior to acceptance of the grading plan submittal.
 - iii. The Final Map must be recorded prior to approval of the grading plan.
- c. For Custom Single Residential Lots.
 - i. If applicable, the septic system must be approved by the County Environmental Health Department prior to acceptance of the grading plan submittal.
 - ii. Same as Section 6-1 A.1.b (NOI).
 - iii. Same as Section 6-1 A.1.c (Permission to Grade letter).
 - iv. Same as Section 6-1 A.2.a.iv above (Closure Calculations).

With regard to single family homes, on occasion, applicants request to obtain a grading or building permit for lots on dirt roads. Because the City has determined that habitable structures (having access from dirt roads) present a clear threat to the public health and safety due to a lack of reliable and/or timely access by emergency vehicles, applicants requesting building permits for lots on dirt roads shall adhere to the ***"Building Permit Issuance Policy for Lots on Dirt Roads"*** (updated May 2009) and its respective agreements. (Refer to Appendix A.)

Per said policy, a grading permit for lots on dirt roads may be granted. However, prior to obtaining a building permit, the property owner shall provide an "all weather" access road both onsite and offsite to the nearest improved, acceptable paved intersection. Said policy applies to all new habitable structures or major additions; exceptions to this are only for:

- Non-habitable structures;
- Repairs, remodeling or additions to existing structures not to exceed 25% of the existing square footage of habitable space or 600 square feet, whichever is less;
- Replacement of structure, due to damage such as fire or flood;
- An existing dwelling unit can be replaced once, and built not to exceed 25% of the existing square feet of habitable space or 600 square feet, whichever is less.

For these exceptions, the applicant shall: (a) acknowledge that it is not the City's responsibility to improve the roads to enhance their property and (b) be required to sign an agreement, agreeing not to oppose and to participate in any future financing district formed to make the necessary road improvements.

- B. Borrow Site/Stockpiling. A borrow site is used to obtain soil material for use in grading on a site. A grading permit associated with a borrow site shall not be issued when, in the opinion of the City Engineer, a significant amount of borrow or waste material is to be removed from a grading site for commercial purposes unless a CUP in accordance with Chapter 17.04 "Permits" of the Temecula Municipal Code has been issued for the operation of a borrow pit on the grading site.

A borrow site/stockpile grading plan shall include the disposition and protection of soil material acquired from an offsite location for use in grading on a site as well as the disposition and protection of any temporary uncompact fill, which is intended to be removed at a later date. Listed below are requirements associated with a borrow site/stockpile grading plan.

1. The applicable Planning Application for the CUP must be approved prior to acceptance of the grading plan submittal.
2. A haul route permit is required for the import and/or export of material, including the source of borrow and/or disposal site.
3. Same as Section 6-1 A.1.b (NOI).
4. Same as Section 6-1 A.1.d (dust control).

Upon approval by the Planning Commission, a grading permit for stockpiling (stockpile permit) may be issued for the import or export of soil materials on a lot or parcel. Said material shall be removed from the site and/or compacted and graded thereon under a subsequently issued mass, rough or precise grading permit within six months of issuance of a stockpile permit, unless modified by the Planning Commission in accordance with this Manual. This permit is subject to the following conditions:

5. Approval by the Planning Commission in accordance with Section 18.06.040 "Types of Work Covered by a Grading Permit" of the Code.
6. Prior to trucking soil to the site, a certification from the soils engineer (for the imported soil) is required for its acceptability.
7. Stockpiled soil shall not be placed below the high-water rim of any surface water bodies within the 100-year floodplain of any surface streams or creeks or in any other location from which it would be susceptible to erosion into receiving waters.
8. The permit shall be valid for the time frame identified in the approved CUP.

C. Erosion & Sediment Control. An erosion & sediment control (ESC) plan (typically submitted with a grading plan) shall be prepared under the direction of and signed by a civil engineer competent in the preparation of such plans and knowledgeable in current ESC methods. Said plan shall be submitted to the City and shall provide for protection of exposed soils and desiltation of runoff at frequent intervals prior to discharging from a site or to storm water conveyance systems (natural water courses, streets, flow-lines, inlets, outlets, etc.). Note the following:

1. The plan shall indicate proposed measures for the control of runoff, erosion and sediment movement.
2. The plan shall include, at a minimum, the measures designed to meet the standards established in Chapter 18 of this Manual.
3. The plan shall be approved prior to the approval of the grading plan.
4. A copy of the approved ESC plan shall be maintained in an obvious and accessible location on the project site.
5. The field copy of the ESC plan shall be redlined to show the current site conditions during construction.

D. Administrative Clearing. Any clearing performed pursuant to this section shall conform to the location, extent and purpose authorized explicitly by the applicable discretionary approvals for development of land. In general, issuance of an administrative clearing (grading) permit is subject to the following conditions:

1. No person shall commence any clearing and grubbing operation without first obtaining a grading permit in accordance with this Manual.

2. A clearing plan showing the location of existing natural vegetation, all existing buildings or structures and the specific area to be cleared on the property (along with an erosion and sediment control plan) shall be submitted and approved.
 3. A biological report or other documentation, which indicates the quantity and quality of existing vegetation as potentially suitable habitat for sensitive species, and any potential impacts on the suitability of remaining habitat onsite and adjacent properties, shall be submitted and approved by the Director of Community Development. (Note: On disturbed sites, this report may be required to recommend re-vegetation with native plants).
 4. As required by the Director of Community Development, an archaeological resource report that indicates the location of sensitive resources, as determined by a qualified archaeologist or paleontologist, shall be submitted and approved.
 5. A Dust Control and Prevention Plan must be approved by SCAQMD in accordance with Section 6-3 B.6 of this chapter.
 6. For development-related clearing. Where the proposed clearing and grubbing is in anticipation of, or pursuant to, development of the affected property, the following shall be accomplished:
 - a. All applicable discretionary approvals for development of the land shall be issued.
 - b. All required environmental mitigation measures shall be implemented.
 7. For non-development clearing. In all other instances where development is not anticipated, the following shall be accomplished:
 - a. Photographs of the site and surrounding properties that clearly indicate existing conditions and vegetation shall be submitted.
 - b. All required environmental mitigation measures shall be implemented as required by previously adopted environmental studies.
- E. Rock Blasting.** All permits for controlled blasting techniques to perform rock excavation shall be processed under special application. Listed below are requirements associated with a rock blasting (grading) permit.
1. A pre-blast survey of surrounding properties must be conducted prior to permit issuance.
 2. During rock blasting, seismic recordings shall be taken for all blasts at locations and levels approved by the City Engineer.
 3. All blasting shall conform to the requirements of the City Engineer, as specified in this Manual.
- F. Paving/Watercourse Alterations.** All work associated with paving and watercourse alterations shall be shown on the precise grading plan (refer to Section 6-1 A.2); said work may be covered under a grading permit.

6-2 **GRADING PERMIT APPLICATION**

The submittal of a grading permit application package (for review and approval by the City) is the first step toward obtaining the permit. Refer to the sections below:

- A. Application Form.** Refer to Appendix B for a copy of the application form. The applicant shall maintain the application's information current until the conclusion of the permitted activities.
- B. Application Package Requirements.** For detailed requirements, refer to Appendix C and/or the most current Land Development Submittal Requirements. Among many items identified, said requirements include a grading plan and the requirements for revisions to approved grading plans. Refer to the following:

1. Content of a Grading Plan. A grading plan shall be submitted on a standard 24" x 36" (D size) bond copy for review and shall include the City's standard title block and applicable standard notes, which are included in Appendices D, E, F and G. Appendix H identifies the typical content of a grading plan. Also, refer to Appendix I for design standards for off-street parking and loading spaces for multi-family, commercial and industrial sites. The purpose of these development standards is to assure provisions for safe, adequate and well-designed off-street parking facilities.
2. Revisions to a Grading Plan. Plan revisions are processed when an applicant makes changes to the plans - either during the plan checking process or after approval of the plans and the project is under construction.
 - a. During Plan Review. Major redesigns/changes implemented prior to issuance of a permit may require additional plan check fees. The City will make the determination of the amount of fees required based on the extent of the redesign/change in order to continue processing the plan review.
 - b. During Construction. Any construction change must first be submitted to the City as a redline revision for review and approval ***prior to implementing changes in the field.***
 - i. Mylar revisions shall be performed in accordance with the City's current mylar policy.
 - ii. The City will make the determination whether a construction change constitutes a "minor" or "major" revision. If the City determines it to be a major construction change, the applicant shall process the change as a new submittal (it will not be accepted as a redline revision). Refer to Appendix C for new submittal requirements.

Note: this section also applies to revisions to construction plans, as noted in Chapter 12.

- C. Expiration of Application Submittal. Applications for which no permit is issued within 180 days following the date of application shall expire. When expired, the plans submitted for plan checking may be returned to the applicant or may be destroyed by the City Engineer without additional notice to the applicant. Note that this section also applies to the expiration of application submittals for encroachment permits, as noted in Chapter 12. The expiration and renewal of application submittals shall be in conformance with Sections 18.06.140 and 18.12.100 "Expiration and Renewal of Grading/Encroachment Application Submittals" of the Code.
- D. Permit Extensions/Renewals. A grading permit shall be valid for 180 days from the date of issuance. Permit extensions (of up to six months) may be granted by the City Engineer upon the applicant's written request showing to the satisfaction of the City Engineer that circumstances beyond his control have prevented, delayed or extended the time required to complete the work. All permit extensions shall be subject to a "permit issuance fee" in accordance with the City's current Fee Schedule. Note that this section also applies to permit extensions for encroachment permits, as noted in Chapter 12. The expiration and renewal of issued permits shall be in conformance with Sections 18.06.160 and 18.12.120 "Expiration and Renewal of Issued Grading/Encroachment Permits" of the Code.
- E. Denial of Permit. The City Engineer may deny the issuance of permit if for some reason he determines that the work, as proposed, will cause hazardous conditions. Note that this section also applies to permit denials for encroachment permits, as noted in Chapter 12. Other possible reasons for denial of permits shall be in accordance with Sections 18.06.180 and 18.12.140 "Denial of Grading/Encroachment Permit" of the Code.
- F. Transfer of Responsibility. In the event the civil engineer of record, geotechnical engineer, engineering geologist or the grading contractor of a project is changed during review or

construction, the applicant shall notify the City by submitting a formal notification letter, verifying the change of the responsible professional. A new grading permit application shall also be submitted with, at a minimum, a grading plan revision in accordance with Section 6-2 B.2 indicating the change(s) of engineer/contractor. This section also applies to improvement plans related to encroachment permits, as noted in Chapter 12.

6-3 **GRADING PERMIT REQUIREMENTS**

If applicable, the following items may be required prior to issuance of any grading permit:

A. Clearances.

1. **Regulatory Agencies.** The City will identify which regulatory agencies and City departments are affected by the project and which may require clearances. The applicant shall then obtain the required written clearances or permits from the applicable agencies and/or City departments; this must occur prior to issuance of permit. Clearances may be required, but are not limited to, the following:

- California Department of Transportation (Caltrans right-of-way)
- California Department of Fish and Game
- Riverside County Flood Control and Water Conservation District
- California Division of Industrial Safety
- Temecula Fire Department
- United States Army Corps of Engineers (404 Certification)
- Riverside County Geologist (seismic areas)
- Riverside County Environmental Health Department (septic system)
- South Coast Air Quality Management District (dust control)
- U.S. Fish and Wildlife Service
- Regional Water Quality Control Board (401 Certification/NPDES requirements)
- Temecula Building & Safety Department (ADA, retaining walls, etc.)
- Temecula Planning Department (environmental clearances may be required to implement the California Environmental Quality Act and any land use permits that may be required in accordance with the City's Development Code)
- Temecula Community Services Department
- Temecula Public Works Land Development Division (street lights, etc.)
- Temecula Public Works Maintenance Group/Parks and Landscape Division (public parks, perimeter/slope and median landscaping, etc.)

2. **Drainage Easements.** For all drainage-ways (where their function is essential to the protection and/or use of multiple properties), a covenant and/or deed restriction shall be recorded by the applicant, placing the maintenance responsibility of the drainage-ways on the owner of record of each respective lot affected. Permanent offsite drainage easements, as required by the City Engineer, shall be acquired by the permittee. Such easements shall be subject to approval of the City Engineer and City Attorney and recorded prior to issuance of permit.

B. Reports. The following reports may be required as part of the initial submittal package:

1. **Conceptual Water Quality Management Plan (WQMP).** This report must be accepted by the City Engineer prior to issuance of final Conditions of Approval. Applicants shall

ensure adherence with the latest version of the Project-Specific WQMP Template ("Template"). At a minimum, the following Template sections shall be addressed:

Section	Title of Section
I	Project Description
III	Pollutants of Concern
IV	Hydrologic Conditions of Concern (Preliminary Surface Hydrology)
V.1	Site Design Best Management Practices (BMP)
V.3	Treatment Control BMPs
VI	Operation and Maintenance Responsibility for Treatment Controls
Appendix B	WQMP Site Plan
Appendix C	Supporting Detail related to Hydrologic Conditions of Concern (Preliminary Surface Hydrology)
Appendix E	Soil and Percolation Reports that specifically address soil infiltration properties
Appendix F	Treatment Control BMP Sizing Calculations and Design Details

2. Final WQMP. This report shall finalize the conceptually accepted portions of the WQMP; it shall also be accepted by the City Engineer, prior to issuance of any permit. A final WQMP shall include the remaining sections of the Template outlined below:

Section	Title of Section
II	Site Characterization
V.2	Source Control BMP's
V.4	Equivalent Treatment Control Alternatives
V.5	Regionally-based Treatment Control BMP's
VIII	Funding
Appendix A	Final Conditions of Approval
Appendix B	Vicinity Map, Receiving Waters Map
Appendix D	Education Material
Appendix G	O&M Agreement
Appendix H	Phase 1 Environmental Site Assessment

3. Geotechnical (Soils) Reports.
 - a. A **geotechnical report** shall be submitted as part of the permit application package. It shall contain all applicable project information, including specific geologic constraints that may affect the site's grading and development. Refer to the following:
 - i. A detailed review of the report shall be provided at 1st plan check. Prior to re-submitting it for a 2nd review, all comments shall be addressed.
 - ii. If the findings and recommendations made in the soils report are changed, the engineer of record shall notify the City.
 - iii. Additional soil-related submittal items will be required for changed site conditions and/or any previously submitted soils report older than one year. Submittal items shall include, at a minimum, an updated letter by the geotechnical engineer indicating the validity of the original findings and recommendations.

- iv. Recommendations contained in the approved reports shall be incorporated into the grading plans and shall become conditions of the permit.
- b. A **preliminary (initial) geotechnical report** shall be prepared subsequent to a subsurface investigation of the site and shall include:
 - i. Info/data on the nature, distribution and strength of existing soil and rock onsite;
 - ii. Physical properties of existing soils; Slope stability analysis;
 - iii. Fill/alluvial settlement analysis; Liquefaction potential analysis;
 - iv. Conclusions as to the adequacy of the site for the proposed construction;
 - v. Recommendations for general and corrective grading procedures, including:
 - The correction of weak or unstable soil conditions and treatment of any expansive soils that may be present;
 - Foundation and pavement design criteria; and
 - Other recommendations, as necessary, commensurate with the project grading and development.
- c. A **preliminary (initial) engineering geology report** may be required; it shall include: (Note that this report may be combined with the preliminary geotechnical report.)
 - i. A description of the site topography and geology including a geology map;
 - ii. An opinion as to the adequacy of the proposed development from an engineering geological standpoint, and an opinion as to the extent known or reasonably inferred instability on adjacent properties that may adversely affect the project;
 - iii. A description of the nearest potentially active faults and their locations; a description of the field investigation;
 - iv. Findings and conclusions on the effect of geological conditions on the proposed development; specific recommendations for plan modifications, corrective grading and/or special techniques and systems to facilitate a safe and stable development; and
 - v. Other recommendations, as necessary, commensurate with the project grading and development.

Engineering geology reports are required for all developments where geologic conditions are considered to have a substantial effect on existing and/or future site stability. This includes grading on hillside sites where heights of cut slopes exceed six feet, unless the requirement is waived by the City Engineer. This requirement may be extended to other sites suspected of being potentially adversely affected by faulting, fissuring or differential settlement.
- d. A **soil/percolation report** addressing soil infiltration for the WQMP may be required.
 - i. A preliminary soils report must be included in Appendix E of the WQMP, regardless of whether or not infiltration BMP's are proposed for the project. It must include boring logs, boring-specific and seasonal-high depths to groundwater and site-wide liquefaction potential.
 - ii. Percolation tests must be conducted when boring logs show predominantly **sandy** subsurface conditions in alluvium, cut or undisturbed soils. Tests shall be in accordance with the Riverside County Manual for Design of Septic Systems and conducted at approximately five feet below proposed finished grade. Percolation test results can either be integrated into the soils report or attached separately and shall be presented in inches/hour (In/Hr). Acceptable percolation rates vary between 0.5 in/hr and 6.0 in/hr.
4. **Fault Hazard Reports.** Prior to issuance of permit, all grading projects that lie within an earthquake fault zone shown on the maps prepared by the State Geologist (pursuant to

the Alquist-Priolo Earthquake Fault Zoning Act ("Act")) shall submit the following information (refer to Appendix J) to the City Engineer for review by the County of Riverside's Transportation and Land Management Agency/Planning Division (TLMA):

- a. The geological/fault hazard (site-specific) report shall:
 - i. Be prepared in accordance with the requirements of the Act by a geologist, who is registered in the State of California.
 - ii. Define and delineate any hazard of surface fault rupture;
 - iii. Include site maps, the Planning Application number and the Assessor's Parcel Number(s) for applicable lot(s).
 - iv. Include a check or money order, payable to the Riverside County Planning Department for the current review fee charges by the County for Alquist Priolo report review. (Refer to TLMA for the latest fee schedule.)
- b. Upon submitting the above information and appropriate fees to the City Engineer, it shall be referred to TLMA for review by a State Licensed Geologist. The County will work directly with the registered geologist, who prepared the report, to obtain an acceptable report. Copies of their comments will be forwarded to the City Engineer.
- c. Upon obtaining an acceptable report, TLMA will prepare a letter including the conclusions and recommendations of the consultant's report, appropriate Conditions of Approval and a statement approving the report. Copies of the final report and approval letter will be transmitted to the City Engineer and the California Division of Mines and Geology in compliance with the Act.

5. Liquefaction Hazard Reports.

- a. In accordance with the Seismic Hazard Mapping Act/Regulations (SHMA/R) (identified in Appendix K), all projects that are located within a seismic hazard zone shall submit a geotechnical report defining and delineating any seismic hazard to the City Engineer for review and approval. The geotechnical report shall:
 - i. Be prepared by a registered civil engineer or certified engineering geologist, competent in the field of seismic hazard evaluation and mitigation;
 - ii. Contain site-specific evaluations of the seismic hazard affecting the project;
 - iii. Identify portions of the project site containing seismic hazards;
 - iv. Identify any known off-site seismic hazards that could adversely affect the site in the event of an earthquake;
 - v. Adhere to requirements of the SHMA/R, which include, but are not limited to:
 - Description of project and geologic/geotechnical conditions at the site, including an appropriate site location map;
 - Evaluation of site-specific seismic hazards based on geologic and geotechnical conditions in accordance with current standards of practice;
 - Recommendations for appropriate mitigation measures as required in Section 3724(a) of the SHMA/R;
 - Name of report preparer(s) and signature(s) of the certified engineering geologist and/or registered civil engineer, competent in the field of seismic hazard evaluation and mitigation.
- b. Public Resources Code Section 2697 (identified in Appendix K) requires that one copy of the approved geotechnical report be submitted to the State Geologist within 30 days of report approval. The engineer of record shall send the report to the following address and provide the City Engineer with a copy of the transmittal:

California Department of Conservation
Division of Mines and Geology
Attn: Seismic Hazard Reports
801 K Street, MS 12-31
Sacramento, CA 95814-3531

6. Dust Control and Prevention Plan.

- a. A Dust Control and Prevention Plan shall be submitted in conjunction with any plan involving clearing, moving or stockpiling of soil. The City Engineer may also require the submittal of this plan for other developments, as deemed necessary. At a minimum, the following conditions shall apply:
 - i. The plan shall demonstrate that fugitive dust emissions will be controlled 24 hours/day, seven days/week, whether or not there is current activity onsite.
 - ii. The plan shall identify the name and phone number of the person responsible for ensuring the plan is implemented and who can be contacted in the event of a dust complaint after normal working hours.
 - iii. The plan shall demonstrate that the discharge of dust from the construction site will not occur or can be controlled depending on the particular site conditions and circumstances. Dust control measures shall include, but not be limited to: the application of water or dust palliatives, the installation of wind fencing, treatment of staging areas and the establishment of performance standards for maintaining the site in a moist condition.
 - iv. When an entire project is to be graded and the subsequent construction on the site is to be completed in phases, the portion of the site not under construction shall be treated with a chemical stabilizer or plant materials and an irrigation system.
 - v. If importing/exporting of soil is necessary as demonstrated by cut/fill quantities on the grading plan, the dust control plan shall include procedures for the control of dust resulting from loading or transportation of soil from, to or within the project site and on public roadways.
- b. All projects with more than 100 acres of disturbed surfaces at any given time, and/or projects, which move more than 10,000 cubic yards of soil on at least three days/year, must submit a dust control plan to **SCAQMD** for review and approval. In such cases, the applicant shall obtain their approval of the plan, prior to issuance of permit by the City.

7. Hydrology/Hydraulic Analysis. When applicable, the engineer of record shall prepare and submit suitable studies and data regarding hydrology/hydraulic analysis and calculations. If required, drainage area maps shall also be submitted to determine the quantity of runoff generated by or tributary to the site, and its effects on the site or upon upstream or downstream properties. Erosion and sediment transfer studies and other supporting data may be required.

C. Miscellaneous Data/Studies. The following supplemental data, studies and/or reports may be required prior to issuance of permit:

1. Limits of Inundation. Said limits on the property, during specified storm frequencies, shall be delineated on the plans; supporting calculations shall also be required.
2. Flood Protection. The engineer of record responsible for plan preparation shall ensure:
 - a. that the building pads to be created through any proposed grading are free from inundation from runoff from specified storms; and
 - b. that floodplain/floodway elevations and widths, sheet flow depths and any other data required by the City Engineer (or by any applicable County, State or Federal flood protection insurance program/requirements) are delineated on the plans.

3. Percolation and Permeability. The engineer of record shall submit studies and data, as applicable, including:
 - a. soil percolation and permeability characteristics and their suitability for use of septic tanks and leach fields; and
 - b. groundwater hydrology studies, data and tests on the quantity and quality of ground water (which can be produced from properties not served by available municipal water systems) and its adequacy for domestic/agricultural use and fire protection.
 4. Sub-Surface Septic Systems. Eastern Municipal and Rancho California Water Districts (EMWD and RCWD) may require a Source Water Assessment report that identifies mitigation measures for subsurface septic systems. Other subsurface system studies include identification of locations of any public wells.
- D. Other Requirements.** After the grading plans (and associated improvement plans, if applicable) have been approved, the applicant shall submit mylars for signatures. Once the mylars have been signed by the City Engineer and prior to issuance of permit, the applicant shall submit to the City Engineer:
1. Two sets of prints of the approved (signed) plans – grading and improvement plans, if applicable, and
 2. A CD containing electronic files of the signed plans (in .tiff format).
- Note: this section also applies to submittal requirements prior to issuance of encroachment permits, as discussed in Chapter 12.

6-4 DISPOSAL OF MATERIALS

The City has an exclusive franchise agreement for solid waste and recycling hauling services with CR&R Incorporated ("Franchisee"). The applicant/contractor shall be responsible for making arrangements with the Franchisee for all recycling and solid waste removal, including construction and demolition debris, for work performed in private development as well as in public rights-of-way.

The applicant/contractor may elect to use the services of another recycling vendor provided that: (1) the vendor has a valid City of Temecula Recycling Permit and (2) the recyclable materials are either donated or sold to the vendor. Under no circumstances may a vendor, other than the Franchisee, charge the applicant/contractor for recycling bin rental, recycling services, consultation or any other service related to recycling.

The following are exclusions and limitations of CR&R's ability to handle specific materials:

- **Export of Excess and Unsuitable Dirt.** Franchisee will not haul excess dirt.
- **Disposal of Hazardous Material.** Applicant/contractor shall contact the Franchisee regarding any hazardous material to determine appropriate disposal method.
- **Hauling Excessive Amounts of Coldplaned (milled) Asphalt.** Applicant/contractor shall contact the Franchisee to determine if the quantity in question can be accommodated, prior to issuance of permits for the project.

The applicant/contractor shall supply proof of disposal at a recycling center, including verification of tonnage by certified weigh master tickets for materials that cannot be accommodated by CR&R or taken by any "city permitted" recycling vendor. Franchisee may be reached at:

**CR&R Incorporated
P.O. Box 1208
Perris, CA 92572
Phone: (800) 755-8112**

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Chapter 9 – HAUL ROUTE PERMIT, APPLICATION & REQUIREMENTS

9

A haul route permit ensures compliance with City and engineering standards and mitigates negative impacts to public safety, traffic congestion, air quality, public streets and the community. A permit may be required prior to commencing the permitted work if soils are being moved on public roadways. This chapter covers the haul route permit conditions, its application process and other requirements. Refer to the Temecula Municipal Code, Title 18, Chapter 18.09 "Haul Route Permit, Application & Requirements."

9-1 HAUL ROUTE PERMIT

A haul route permit may be required when soils are moved on public roadways to or from a grading site. Because this permit may be triggered by various factors such as location, quantity of soil, truck trips, traffic and NPDES concerns, the City will determine if this permit is required on a case-by-case basis, prior to allowing the hauling operation to begin. It is the contractor's responsibility to verify if a permit is required.

A. Conditions of Permit Issuance. Issuance of permit may be subjected to the following:

1. Prior to issuance of permit,
 - a. the haul route shall be approved by the City Engineer. Any deviation from the designated route shall constitute a violation of the conditions of the permit issued under the provisions of the Code.
 - b. a certification that the import site can receive soil material by the oversight agency and the property owner shall be provided.
 - c. evidence approving the haul routes within other agency jurisdictions shall be provided.
2. The applicant shall notify the City Engineer at least 24-hrs before hauling is to start.
3. In lieu of covering hauled loads, haul vehicles will comply with the freeboard requirements (Section 23114 of the California Vehicle Code) for public/private roads.
4. Dust control measures, consistent with provisions of Section 6-3 B.6 of Chapter 6, shall be implemented.
5. Loading and transportation of soils material from or to the site shall comply with Section 18.12.260 "Time of Operations within Public Rights-of-Way" of the Code.
6. The permit may specify other conditions, including the posting of a cash bond, as determined by the City Engineer, to minimize disruption of normal traffic activities and public inconvenience, and to prevent or minimize damage to public/private improvements.
7. All hauling operations shall be limited to the stated operating hours and days per the application permit. No work shall be conducted on weekends and/or city recognized holidays.
8. No truck queuing or staging shall be allowed on public streets.
9. All work shall comply with City (noise) ordinances.
10. The permittee shall:

- a. obtain a haul route permit prior to transporting any soil.
- b. comply with National Pollutant Discharge Elimination System (NPDES) requirements and follow appropriate project-specific Best Management Practices (BMPs).
- c. assume all liability for accidents and/or injuries resulting from their operations.
- d. be responsible for all clean up and repair/damage of any City streets affected by the hauling operations.
- e. not stage, stockpile or operate any equipment outside the permitted work zone without written approval of the City Engineer.
- f. be responsible for maintaining public rights-of-way used for hauling purposes free of dust, earth material or debris, attributed to the construction operation.
- g. be responsible to dispose all waste and recycling materials (removed due to the hauling operation) in compliance with the City's exclusive franchise agreement with CR&R Incorporated. Refer to Chapter 6, Section 6-4 of this Manual.

9-2 **HAUL ROUTE PERMIT APPLICATION**

- A. **Application Form.** Refer to Appendix L for a copy of the application form. The applicant shall maintain the application's information current until the conclusion of the permitted activities.
- B. **Application Package Requirements.** Refer to Appendix C and/or the most current Land Development Submittal Requirements.
- C. **Haul Route Plan Requirements.** A haul route plan, which expires six months from the date the application is submitted, is to be submitted to the City for review and approval if an applicant plans to move considerable soil or oversized equipment on public rights-of-way. Listed below are specific requirements:
 - 1. Access to the site shall only be at points designated on the approved haul route plan.
 - 2. The last 50 feet of access road, as it approaches the intersection with a public roadway, shall have a grade not to exceed three percent and be constructed of gravel (or equivalent material) to prevent mud and debris from tracking onto public streets. Mud plates, shaker plates and/or additional equipment may be required at the City Engineer's discretion. There must be 300 feet clear, unobstructed sight distance to the intersection from both the public roadway and the access road. If said sight distance can't be achieved, flagmen shall be posted.
 - 3. A temporary R1 "Stop" sign conforming to requirements of the California Manual on Uniform Traffic Control Devices (MUTCD) shall be posted at the entrance of the access road to the public roadway.
 - 4. Advance warning signs shall be posted on public roadways 400 feet on either side of the access intersection. The sign shall be a W8-6 "Truck Crossing" sign with an orange background and black legend. The standard size of a W8-6 sign is 30 inches. The temporary sign shall be placed in the rights-of-way, as approved by the City Engineer, and shall be placed in such a way as to avoid conflicts with pedestrians, bicycles or equestrian traffic. Signs shall be covered or removed when the access is not in use.
 - 5. Protection of public utilities.
- D. **Haul Route Restrictions.** Haul routes may not be permitted through areas where active school crossing controls are in place or during peak travel times. Other restrictions may be placed, as directed by the City Engineer, due to special conditions and/or on-going construction activities. Additional application requirements, route restrictions and costs may also be applied to hauls involving over-size or over-weight vehicles or hazardous materials.

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Chapter 11 – NOT USED

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Chapter 12 – ENCROACHMENT PERMIT, APPLICATION & REQUIREMENTS

12

An encroachment permit is required prior to commencement of any construction or non-construction related work within public rights-of-way. This chapter identifies improvements that may necessitate an encroachment permit, the permit application process and other permit requirements such as clearances, required reports, disposal of materials, etc. Refer to the Temecula Municipal Code, Title 18, Chapter 18.12 "Encroachment Permit, Application & Requirements."

12-1 ENCROACHMENT PERMIT

When required, an encroachment permit shall be issued by the City Engineer in accordance with this Manual.

A. Major Construction-Related Improvements. Major construction-related improvement plans shall be submitted for review and approval prior to issuance of an encroachment permit for work within public rights-of-way (R/W). Typical construction-related activities requiring this permit include work associated with the following improvement plans: (The design standards for such plans are also noted.)

1. Offsite/Public Improvements. Offsite/public improvements shall be designed utilizing the City's current Improvement Standard Drawings for Public Works Construction and as directed by the City Engineer.
2. Street Improvements. Street improvement plans shall be designed utilizing the City's current Improvement Standard Drawings for Public Works Construction and the Caltrans Highway Design Manual.
3. Storm Drain Improvements. Storm drain improvement plans shall be designed utilizing the Riverside County Flood Control & Water Conservation District's (RCFC&WCD) current Standard Drawings and Drafting Manual.
4. Sewer and/or Water Improvements. Sewer and/or water improvement plans shall be designed utilizing the current Rancho California Water District (RCWD) and Eastern Municipal Water District (EMWD) Specifications and Standard Drawings, along with the City's current Improvement Standard Drawings for Public Works Construction.
5. Dry Utility Improvements. Dry utility improvements shall be designed utilizing the design requirements of the appropriate utility company (electric, gas, all telecommunication facilities, etc.). The design shall be governed by that respective utility company's standards and specifications. Installation of these facilities shall be consistent with the City's current Improvement Standard Drawings for Public Works Construction.
6. Traffic Control Plans. All traffic control plans shall conform to provisions of the California Manual on Uniform Traffic Control Devices (MUTCD) (latest edition) and City requirements.
7. Traffic Signing & Striping Improvements. All traffic signing & striping plans shall conform to provisions of the California MUTCD (latest edition), the Caltrans Standard Plans and Specifications (latest edition) and City requirements.
8. Traffic Signal Improvements. All traffic signal plans shall conform to provisions of the California MUTCD (latest edition), the Caltrans Standard Plans and Specifications (latest edition) and City requirements.

B. Minor Construction-Related Improvements. Minor construction-related improvements that may require an encroachment permit include the following:

1. Driveway Approaches. This includes residential and commercial driveway approaches in accordance with City standards.
2. Excavation. This includes parallel excavation (trenching, etc.) and street crossings in accordance with City Standards.
3. Parkway Drains. This includes any parkway drains or curb cores (within public rights-of-way) in accordance with City Standards.
4. Street Closures. This includes any street closure for construction-related work to be performed within public rights-of-way.
5. Temporary Power Poles. This includes the installation of temporary power poles within public R/W.
6. Oversize Transport. The County of Riverside Transportation Department issues oversize transport permits for the City. Their contact information is: (951) 955-6880. A City haul route permit may be required; refer to Chapter 9.
7. Tree Trimming. This includes the maintenance and trimming of trees, which requires encroachment into *major circulation roads*.
8. Underground Service Alert. This includes identifying all utilities within public rights-of-way.
9. Utility Work. This includes any utility company encroaching into public rights-of-way for facility upgrades, repairs, maintenance, etc.
 - a. In some cases, utility companies obtain a blanket permit from the City. This type of encroachment (utility) permit is issued annually and allows utility companies to perform routine maintenance work without having to obtain numerous permits throughout the year.

C. Miscellaneous Activities. Activities that require an encroachment permit may also include:

1. Block Parties. This includes any residential event requiring closure of public streets.
2. Movie Filming. This includes any event that affects access or closure of public streets.
3. Street Closures. This includes any event requesting closure of a public street for miscellaneous purposes/activities and/or special events.
4. Access to Utility Agency Facilities. This includes required street closures for any utility agency needing to access their facilities.

12-2 ENCROACHMENT PERMIT APPLICATION

The submittal of an encroachment permit application package (for review and approval by the City) is the first step toward obtaining the permit. Refer to the following:

A. Application Form. Refer to Appendix M for a copy of the application form. The applicant shall maintain the application's information current until the conclusion of the permitted activities.

B. Application Package Requirements. Refer to Appendix C and/or the most current Land Development Submittal Requirements. Note the minimal requirements of, and revisions to, a construction plan:

1. Content of a Construction Plan. For plan size and applicable standard notes, refer to Chapter 6, Section 6-2 B.1. Other applicable notes for construction plans may include "Traffic Control Plan Guidelines and General Notes" (Appendix N). Refer to Appendix O for the typical content of a construction plan.

2. Revisions to a Construction Plan. Refer to Chapter 6, Section 6-2 B.2.
- C. Expiration of Application Submittals. An encroachment permit shall be valid for a period of 180 days from the date of issuance. Refer to Chapter 6, Section 6-2 C.
- D. Permit Extensions/Renewals. Refer to Chapter 6, Section 6-2 D.
- E. Denial of Permit. Refer to Chapter 6, Section 6-2 E.
- F. Transfer of Responsibility. In the event the civil engineer of record, geotechnical engineer, engineering geologist or the contractor of a project is changed during review or construction, the applicant shall notify the City by submitting a formal notification letter, verifying the change of the responsible professional. A new encroachment permit application shall be submitted with, at a minimum, a construction plan revision in accordance with Section 6-2 B.2 indicating the change(s) of engineer/contractor.

12-3 ENCROACHMENT PERMIT REQUIREMENTS

If applicable, the following items may be required prior to issuance of encroachment permits:

- A. Clearances. The City will identify which regulatory agencies and City departments are affected by the project and which may require clearances. The applicant shall then obtain the required written clearances or permits from the applicable agencies and/or City departments; this must occur prior to issuance of permit. Clearances may be required, but are not limited to, the following:

- California Department of Transportation (Caltrans right-of-way)
- Temecula Fire Department
- South Coast Air Quality Management District (dust control)
- Temecula Building & Safety Department (ADA, retaining walls, etc.)
- Temecula Community Services Department
- Temecula Public Works Land Development Division (street lights, etc.)
- Temecula Public Works Maintenance Group/Parks and Landscape Division (public parks, perimeter/slope and median landscaping, etc.)
- Rancho California Water District (water facilities)
- Eastern Municipal Water District (sewer and water facilities)

- B. Reports. Various reports may be required as part of the initial permit submittal package. These reports may include, but are not limited to: Water Quality Management Plan, Dust Control & Prevention Plan and geotechnical (soils) reports. Refer to Chapter 6, Section 6-3 B for report descriptions.
- C. Other Requirements. Other requirements associated with the encroachment permit process shall also include:
 1. Requirements for disposal of materials (refer to Chapter 6, Section 6-4 of this Manual);
 2. Miscellaneous items to include security agreement(s) and required certifications/reports such as a pavement design street sections, subgrade/base certifications, if applicable;
 3. The submittal requirements (two prints and a CD of the approved signed plans) prior to issuance of permit. The CD shall be in **.tiff format**. Refer to Chapter 6, Section 6-3 D.

Chapter 13 – NOT USED

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Chapter 14 – NOT USED

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Chapter 15 – DESIGN STANDARDS

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This chapter describes technical requirements associated with design standards for construction and grading plans for work on private development and public rights-of-way. It covers technical design standards for grading (excavation) as well as standards for asphalt concrete paving, base, retaining walls/structures, driveways/access points and hillside development. Refer to the Temecula Municipal Code, Title 18, Chapter 18.15 "Design Standards" and Appendix P (the California Building Code's Appendix J).

15-1 CUTS

A cut is the removal of earth material by artificial means. The slope of cut surfaces shall be no steeper than is safe for the intended use, but in no case shall it be steeper than two horizontal to one vertical (2:1).

No slopes shall exceed 30 feet in vertical height without a bench, except as noted below:

- A. **Geotechnical Report.** The applicant provides a geotechnical engineer's and/or an engineering geologist's report(s) stating that the project site has been investigated and specifically recommends that a cut slope at a steeper angle will be stable and not create a hazard to public/private property, or environmental considerations dictate otherwise; and
- B. **Geotechnical Recommendation.** The City Engineer may require specific recommendations from the geotechnical engineer and/or engineering geologist to support any such recommended deviations. The City Engineer shall either: approve the recommendation (as submitted), approve it subject to specified conditions or deny it.

15-2 FILLS

Fills are depositions of earth materials by artificial means. Refer to the following below:

- A. **Fill Location.** Setbacks at top of the cut slopes shall not be less than that shown in Figure A ("Setback Dimensions") in Section 15-3 of this chapter or than is required to accommodate any required interceptor drains, whichever is greater. The area beyond the toe of the fill shall be sloped for sheet overflow or a protected drain shall be provided.
- B. **Degree of Slope.** The slope of fill surfaces shall be no steeper than is safe for the intended use, but in no case, shall it be steeper than two horizontal to one vertical (2:1).
- C. **Temporary Slopes.** Exceptions to the above may be made for temporary slopes upon written request, at the discretion of the City Engineer, where public health, safety or welfare is not threatened. A "temporary slope" refers to a slope that would be removed, reconstructed or replaced with a retaining structure within a reasonable time frame.
- D. **Preparation of Grounds.**
 - 1. Ground surfaces shall be prepared to receive fill by removing vegetation, non-complying fill, topsoil and other unsuitable materials and by scarifying to provide a bond with the new fill.

2. Where existing slopes exceed five feet in height and/or are steeper than five horizontal to one vertical (5:1), the ground shall be prepared by benching into competent material as determined by the geotechnical engineer and approved by the City Engineer.
3. The ground surface below the toe of fill shall be prepared for sheet flow runoff.
4. Where fill is to be placed over a cut slope, the bench under the toe of the fill shall be per the Geotechnical Engineer and/or Engineering Geologist Report.

E. Fill Material. Only soils material free of tree stumps, organic matter, trash, garbage, sod, peat and other deleterious materials shall be permitted.

One exception includes: Rocks larger than six inches in greatest dimension shall not be used unless the method of placement is properly devised, continuously inspected and supervised by the geotechnical engineer. In addition, the following shall apply:

1. Prior to issuance of a grading permit, potential rock disposal areas shall be delineated on the grading plan.
2. Rocks sized greater than six inches in greatest dimension shall be 10 feet or more below grade, measured vertically, or as recommended by the geotechnical engineer or engineering geologist.
3. Rocks shall be placed so as to assure filling of all voids with fines.

Note: When the design of the development or covenants and restrictions clearly provide irrevocable assurance that no structure or utilities will be placed on precisely definable areas, these burial depths may be reduced with the approval of the City Engineer.

F. Compaction.

1. All fill shall be compacted to a minimum of 90% of maximum density as determined by the most current California Building Code (CBC) Standards, or equivalent, as approved by the City Engineer.
2. Locations of field density tests shall be determined by the soil engineer or approved testing agency and shall be sufficient in both horizontal and vertical placement to provide representative testing of all fill placed. Testing in areas of a critical nature or special emphasis shall be in addition to the normal representative samplings. Field density shall be determined in accordance with the most current CBC Standards, or equivalent, as determined by the City Engineer.
 - a. Exception: Where lower density and very high potential expansion characteristics as defined by the most current CBC exist, lesser compaction may be granted by the City Engineer upon justification and recommendation by the geotechnical engineer.
3. Fill slopes shall be compacted to the finish slope face as specified in sub-paragraph F.1 of this section. The soil engineer shall provide specifications for the method of placement and compaction of the soil within the zone of the slope face.
4. Sufficient maximum density by test methods set forth in the most current CBC, or an equivalent method approved by the City Engineer, shall be performed during the grading operations to verify that the maximum density curves used are representative of the soils material placed throughout the fill.

G. Buttress/Stabilization Fills. Recommendations for buttress/stabilization fills by the geotechnical engineer shall be accompanied by:

1. A report setting forth the soil/geologic factors necessitating the buttress/stabilization fill;
2. Stability calculations based on both static and pseudostatic conditions, (pseudostatic loads need not normally be analyzed when bedding planes are flatter than 12 degrees from the horizontal);

3. Laboratory test data upon which the calculations are based;
4. A copy of the approved grading plan showing the location of the buttress/stabilization fill;
5. A scaled section of the buttress/stabilization; and
6. Recommendations with details of sub-drain requirements.

H. Utility Line Backfills. The following shall be adhered to:

1. Backfill for on-site utility line trenches such as water, sewer, gas and electrical services shall be compacted and tested in accordance with paragraph F.1 of this section.
2. Alternate materials and methods may be used for utility line backfill, provided that the material specification and method of placement are recommended by the geotechnical engineer and approved by the City Engineer, prior to backfilling.
3. The final utility line backfill report from the project geotechnical engineer shall include a statement of compliance by the geotechnical engineer that the tested backfill is suitable for the intended use.

15-3 SETBACKS

A setback is the distance that a specific item is set back from a control point, as required by local zoning codes. The following must be adhered to, ***as it relates to private development:***

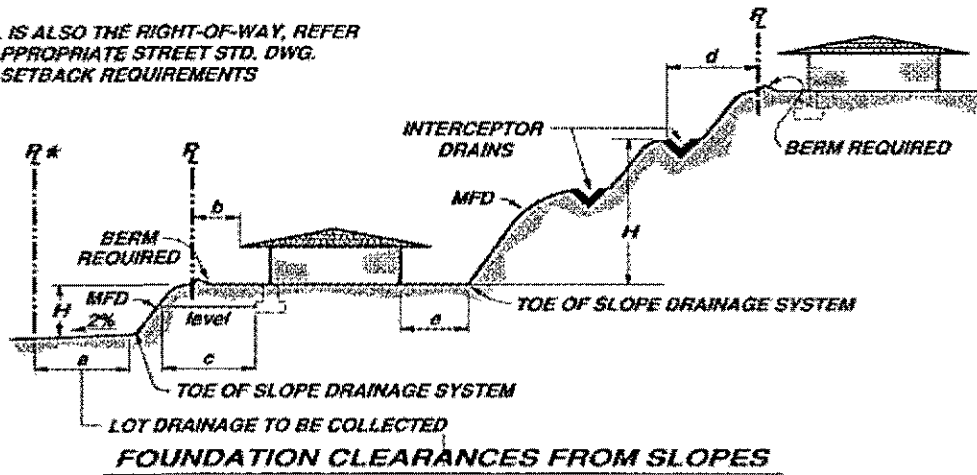
A. General. Setbacks and other restrictions specified by this Manual are minimum and may be increased or decreased by the City Engineer or by the recommendation of a civil or geotechnical engineer, if necessary for safety and stability, to prevent damage of adjacent properties from deposition or erosion or to provide access for slope maintenance and drainage. Retaining walls may be used to reduce setbacks, when approved by the City Engineer.

1. Design Standards for Setbacks

- a. Setbacks between graded slopes (cut or fill) and structures shall be provided in accordance with Figure A in this section.
- b. The tops and toes of slopes shall be set back from outer boundaries of the permit area in accordance with Figure A. Lot lines shall be located at the top of slopes.
- c. Where requirements of the California Building Code or Title 17 "Zoning" of the Temecula Municipal Code exceed the minimum setbacks specified herein, the more restrictive setback provisions shall apply.

FIGURE "A" SETBACK DIMENSIONS

(*) IF PL IS ALSO THE RIGHT-OF-WAY, REFER TO APPROPRIATE STREET STD. DWG. FOR SETBACK REQUIREMENTS



DRAINAGE DIMENSIONS

Table A

Minimum Setback from Adjacent Slope					
H (Feet)	a	b	c	d	e
0 - 6	2'	7'	2'	2'	3' min.
6 - 15	H/5	7'	H/3 2' min.	H/5	H/2
15 - 30	H/5	H/2	H/3 5' min.	H/5	H/2
+ 30	H/5 20' max.	10'	H/3 10' min.	H/5 10' max.	15'

"Figure A" Notes

1. PL means property line; MFD means manufactured slope.
2. Setbacks shall also comply with the Development Code.
3. Table A applies to manufactured slopes 2:1 or steeper natural slopes. Setbacks from natural slopes flatter than 2:1 shall meet approval of the City Engineer.
4. "b" may be reduced to five feet minimum if an approved drainage device is used.
5. If the ascending slope between "a" and "c" levels is replaced by a retaining wall, "a" setback may be reduced to zero. The height of the retaining wall shall be determined by the MFD.
6. "b" is measured from the face of the structure to the toe of the slope.
7. "d" is measured from the lower outside edge of the footing along a horizontal line to the face of the slope. Under special circumstances, "d" may be reduced as recommended in the approved soil report and approved by the City Engineer.
8. "e" shall be increased, as necessary for interceptor drains.
9. The findings and recommendations from the geotechnical report will establish the appropriate setbacks; however, they shall not exceed the minimums specified in Figure A.

- B. Earthquake Fault Zones.** All projects that lie within an earthquake fault zone, as identified in Chapter 6, Section 6-3 B.4 of this Manual, shall comply with the setback requirements established in accordance with the Act.

15-4 EXPANSIVE SOILS

In general terms, an expansive soil expands when it absorbs water. The movements and pressure caused by their expansive characteristics may cause significant damage to buildings and structures. Refer to the following:

- A. Tests.** Tests for expansive soils shall be performed on soils within four feet of the finish grade of any area intended or designed as a location for a building. Whenever expansive soils are encountered:
1. The permittee shall remove the expansive soil to a minimum depth of four feet below finish grade and replace with properly compacted, non-expansive soil; or
 2. The geotechnical engineer may recommend a modification to the requirement for removal and replacement of expansive soils.
- B. Expansive Soils from Cut Areas.** At the discretion of the geotechnical engineer, expansive soil from cut areas shall be placed in areas that will not affect foundations, streets or other support structures including slopes. Non-expansive materials shall be reserved, stockpiled, or otherwise, handled so that they may be placed as a cap over expansive soils.
- C. Disposal of Expansive Soils.** Expansive soils that can't be disposed of onsite, as described above, shall be disposed of offsite by either:
1. Disposal outside the City limits in accordance with Chapter 6, Section 6-4 of this Manual.
 2. Disposal at another location within the City, provided that said location is covered by a grading permit and the expansive soils can be disposed of at said location with written approval of the owner and geotechnical engineer.

15-5 BERMS

Unless waived by the City Engineer, a compacted berm shall be constructed at the top of all slopes steeper than five horizontal to one vertical (5:1) and greater than three feet in vertical length. The berm shall conform to the slope and shall be a minimum of six inches high and one foot wide.

15-6 TERRACING AND DRAINAGE

Bench terraces are designed level steps/areas constructed in the face of a graded slope (between embankments) needed for drainage and maintenance purposes. The placement of terraces and drainage devices also assists with drainage, erosion control and slope stability. Refer to the following below:

- A. Terraces.** Manufactured slopes greater than 30 feet in height require terraces at least six feet in width established at not more than 30 feet vertical intervals on all cut or fill slopes to control surface drainage and debris (except where only one terrace is required, it shall be at approximately mid-height). For cut or fill slopes greater than 60 feet and up to 90 feet in vertical height, one terrace at approximately mid-height shall be 12 feet in width. Terrace widths and spacing for cut and fill slopes greater than 90 feet in vertical height shall be designed by a professional engineer and approved by the City Engineer. Existing slopes in excess of 30 feet requires findings and recommendations by a geotechnical engineer regarding the placement of terracing and drainage. Suitable access shall be provided to allow for cleaning and maintenance.
- B. Terrace Drains.**

1. Terrace drains shall be constructed on all slopes greater than 30 feet in height, using concrete with suitable reinforcement, with a minimum gradient of five percent and shall be paved with reinforced concrete, or approved equal, not less than three inches in thickness. Construction of the drains shall be such that concrete is a minimum of one-half inch (0.5") below (and a maximum of four inches below) the surface elevation of the adjacent grade. The terrace drain shall have a minimum depth at the deepest point of one foot and minimum width of five feet measured across the top and shall be designed to accommodate the runoff intercepted.
 2. Unless otherwise approved by the City Engineer, a single run of terrace drain shall not collect more than 13,500 square feet (projected) of drainage area without discharging into a down drain or other approved collection device. Splash walls, velocity reducers, flow spreaders and other structures shall be provided to the satisfaction of the City Engineer. All down drains shall be constructed of concrete with suitable reinforcement and shall equal the cross-sectional area of the terrace drain or be a pipe of approved material and of 12 inches minimum diameter.
 3. Discharge from the drain shall be accomplished in a manner to prevent erosion and approved by the City Engineer.
- C. Interceptor Drains.** Concrete interceptor drains shall be installed along the top of all manufactured slopes where the tributary drainage area flows toward the slope and has a drainage path to top of slope greater than 40 feet measured horizontally. Interceptor drains shall be paved with a minimum of three inches of reinforced concrete. They shall be designed to contain the 100-year flow and have a minimum depth of 18 inches and a minimum paved width of 36 inches measured horizontally across the drain. The slope of the drain shall be a minimum of two percent or as approved by the City Engineer.
- D. Subsurface Drainage.**
1. Cut and fill slopes shall be provided with subsurface drainage as necessary for stability and as recommended by the geotechnical engineer and/or engineering geologist.
 2. All canyons and buttress fills shall be provided with sub drain drainage.
- E. Drainage Across Property Lines.** Drainage across property line shall not exceed that which existed prior to grading. Excess or concentrated drainage shall be contained onsite or directed to an approved drainage facility. Erosion of the ground in the area of discharge shall be prevented by installation of non-erosive down drains or other devices.

15-7 PAD GRADING

Pad grading is defined as the grading-related work associated with creating the pad. This section covers storm water runoff and finished grading.

- A. Storm Water Runoff.** Storm water runoff from lots or adjacent properties shall not be carried over cut or fill slopes steeper than five horizontal to one vertical (5:1). Such runoff shall be provided for as follows:
1. Each lot shall be graded so that storm water will drain from the back and through the side yard and front yard with a minimum grade of one percent directly to an abutting street or approved drainage facility, without flowing across other lots or cut and fill slopes. Pads shall be rough graded to a minimum slope of one and one-half percent (1.5%) to insure that finished grading provides one percent minimum slope on swales. Where the velocity of the flow is found to be erosive, an improved drainage device shall be required.
 2. When the above is not possible, as determined by the City Engineer, storm water shall be collected along the top of banks or at the rear of the graded lots by means of

improved gutters, interceptor drains or in area drains and conveyed to an adequate outlet, which does not drain across the sidewalks.

3. Area drains shall be sized by engineer's hydraulic calculations to convey the 100-year storm flows. The drain pipe shall be a minimum of three inches in diameter and constructed of solid wall pipe. Minimum pipe slope shall be one percent and cleanouts shall be provided every 100 feet and at angle points and junctions in the system. Overflow design shall ensure a ponded water surface elevation to be six inches below the certified pad grade (one foot below finished floor elevation). An alternative overflow shall be designed and constructed to insure the safety of the structure and adjacent properties in the event of drain blockage.
 4. All foundations shall be designed and installed to produce a finished floor elevation a minimum of six inches above surrounding certified grade.
 5. No landscape area shall allow ponding of water within five feet of any structure. To prevent ponding, catch basins and area drains shall be installed in all landscaped areas adjacent to structures and hardscape areas within five feet of the structures. Catch basins/inlets shall be installed as necessary to provide adequate drainage.
- B. Finished Grading.** Unless otherwise approved by the City Engineer, finished grading shall slope away from the perimeter of the building at a slope of two percent for a minimum of three feet. This requirement shall also apply to all flatwork and landscaped areas adjacent to the structure.
1. The discharge from any down drain, ditch or pipe shall be controlled so as to prevent the erosion of the adjacent grounds. Velocities shall be reduced by means of adequately sized aprons of rock, grouted riprap or box-type energy dissipaters. Sizing shall be designed based upon flow velocities and riprap shall be placed in a manner so as not to create other erosion problems and in conformance with GreenBook Standards.
 2. Surface drainage shall not be carried across a lot or parcel within three feet of a structure without the use of an approved drainage structure.
 3. Roof gutter downspouts shall be discharged a minimum of three feet beyond the structure and to landscaped areas, where applicable. Roof gutters shall not be tied into sanitary sewer systems.

15-8 **ASPHALT CONCRETE PAVEMENT AND BASE STANDARDS**

The following asphalt concrete pavement and base standards shall be adhered to and shall be in accordance with the GreenBook and City standards. Refer to the City's Paving Notes (Appendix G).

- A. Requirements.** Prime coat, tack coat and seal coat shall meet the current standards of the City for road construction, the GreenBook and/or as approved by the City Engineer.
1. **Asphalt Concrete.** Asphalt concrete materials shall conform to Section 203-6 "Asphalt Concrete" of the GreenBook and asphalt concrete shall be Type **B-PG 70-10** for the base course and **Type C2 PG 70-10** for finish and overlay courses.
Note: To prevent or minimize shoving (which is a type of asphalt concrete pavement failure), the City reserves the right to require a modified asphalt concrete mix design with properties that provide high stability (i.e., the ability to resist shoving and rutting, angular aggregate particles with a rough surface texture, etc.) in compliance with the GreenBook and/or Caltrans specifications.
 2. **Aggregate Base.** Compacted base material shall be crushed aggregate base or crushed miscellaneous base per City standards, the GreenBook and as directed by the City Engineer. Principal and Urban arterial roads require crush aggregate base.
- B. Cost Estimates.** Asphalt concrete is classified as a secondary drainage device when used for roadway and parking lot surfacing and other similar uses. Accordingly, the cost of all

paving, with the exception of single-family driveways, shall be included in the engineer's cost estimate.

- C. **Subgrade Compaction.** Subgrade soils material shall be compacted to a minimum of 95% compaction and shall comply with the soils engineer's recommendation.
- D. **Soil Sterilization.** Unless otherwise approved by the City Engineer, base grade soils material shall be sterilized to preclude plant growth.
- E. **Pavement Structural Section.** The project's geotechnical engineer, soil engineer or design civil engineer shall recommend a pavement structural section(s) for parking lots/service roads and public/private streets for all developments, based on current City standards.

15-9 **RETAINING WALLS & STRUCTURES**

A retaining wall is designed to resist lateral earth and/or fluid pressures (surcharge) in compliance with the California Building Code and acceptable engineering practices. In the City, retaining walls and structures are permitted separately through the Department of Building & Safety. However, any proposed retaining wall and/or structure must be shown on the grading plan, with proper elevations, to identify satisfactory drainage, grading, elevations, setbacks, etc. Refer to the following:

- A. **Cross-Sectional Views.** Said views of retaining walls shall be shown on construction and/or grading plans.
- B. **Building Permit Authority.** Construction and/or grading plans shall indicate which walls are to be constructed and inspected under the authority of a building permit after rough grade approval. Any temporary slopes shall be clearly shown on construction/grading plans.
- C. **Building & Safety Review.** All retaining walls and structures shall be reviewed and approved by the Department of Building & Safety, and shall be ready for permit issuance prior to approval of the construction and/or grading plan.
- D. **Manufactured Slopes.** All proposed or existing manufactured slopes (as identified in Figure A in Section 15-3 A of this chapter) require a slope stability report.

15-10 **DRIVEWAYS & ACCESS POINTS**

Driveways and/or access points may be defined as private ways for vehicles to enter, exit, access or approach to or from a private property to a public street. Driveways and access points shall meet required design, sight distance and placement criteria, in accordance with City standards and as approved by the City Engineer. It shall be unlawful to construct any new driveway/access point or to alter an existing one, which does not conform to City standards. Refer to the following below:

- A. **Design to City Standards.** All driveway approaches and driveways shall be designed in accordance with current City standards.
- B. **Driveway Slopes.** All private driveways in excess of two percent shall be designed in accordance with Public Works and Fire Department standards.
- C. **Secondary Driveway Access.** All requests for a permanent secondary driveway access are subject to approval by the City Engineer and must meet the following criteria:
 - 1. Property is one-half (½) acre (i.e., net) or larger.
 - 2. Property has a minimum frontage of 100 feet.

3. The existing & proposed driveway centerlines are a minimum distance of 50 feet apart.
 4. The proposed access is not an identified Circulation Element street.
 5. The proposed access is a minimum of 250 feet away from any Circulation Element intersections.
 6. The proposed access shall have adequate sight distance based on prevailing vehicular speed on the roadway.
 7. The average daily traffic on the roadway must not exceed 5,000 vehicles per day.
- D. Compliance with Fire Codes.** Driveways and access points shall comply with the California Fire Code Chapter 5 and 14 (identified in Appendix Q) and as amended in the Code, Section 15.16.020.
- E. Temporary Access.** In cases where a temporary access is approved prior to issuance of a building permit, the permanent access point shall be complete prior to issuance of a certificate of occupancy.

15-11 HILLSIDE DEVELOPMENT

Hillside development shall comply with Section 17.03.030 of the Temecula Municipal Code and shall go through a process to permit orderly development of property within Hillside Residential Districts. The permit process ensures that projects comply with hillside development standards aimed at protecting the public health, safety and welfare of the general public. Refer to the following requirements below:

- A. Hillside Development Plan.** The applicable hillside development plan must be approved by the Planning Commission, **prior to acceptance** of the grading plan submittal package.
- B. Submittal Package.** The submittal package shall include, but not be limited to, the following items **in addition** to the items listed in Chapter 6, Section 6-2 B:
1. A topographic map (prepared by a licensed land surveyor or a registered civil engineer) shown on a scale no smaller than one inch equals 200 feet (1":200') with contour intervals not exceeding 10 feet.
 2. A slope analysis (prepared by a registered civil engineer) showing the following slope categories: 0-15% grade, 16-20% grade, 21-25% grade.
 3. An underground utility plan.
 4. Any other required analysis deemed appropriate.
 5. A rock blasting (grading) permit, if previously approved in the Hillside Development plan.
 6. The grading plan content shall also include the following requirements:
 - a. Delineate and label all existing peaks, ridge lines, hillsides and other significant landforms, including rock outcroppings.
 - b. Delineate and label all areas within 200 feet of a peak or ridge line.
 - c. Delineate and label all existing and proposed facilities impacted by grading.
- C. Other Requirements.** In order to protect, preserve, enhance and promote the public health, safety and welfare and specifically protect the public and property from hazards, the following requirements shall be met:
1. Areas situated within 200 feet of a peak or ridgeline shall not be disturbed.
 2. Natural slopes having a grade of 25% or greater shall not be disturbed.
 3. The horizontal distance between a natural or graded slope to any proposed or existing structure shall not be less than 20 feet.

4. The vertical distance of a graded slope shall not exceed 15 feet from the toe to top of slope, unless a five foot bench is placed between two graded slopes. The maximum height of a graded slope, including required benching, shall not exceed 30 feet.
5. The use of a rock blasting permit shall be strongly discouraged.
6. Site disturbance and grading shall be kept to a minimum.

Chapter 16 – NOT USED

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Chapter 17 – NOT USED

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Chapter 18 – EROSION AND SEDIMENT CONTROL

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At the start of construction activity, it is imperative that effective erosion and sediment control measures be established to mitigate (or eliminate) pollutants from discharging directly onto public streets and/or storm drain conveyance systems. Erosion and sediment control measures shall comply with the National Pollutant Discharge Elimination System (NPDES) regulations/Municipal Separate Storm Sewer System (MS4) permit as well as City and engineering standards for erosion prevention, sediment control and general storm water quality management.

This chapter identifies construction runoff compliance, erosion and sediment control measures and Best Management Practices (BPMs) for work in private development and public rights-of-way. It also covers construction inactivity and other NPDES requirements. Refer to the Temecula Municipal Code, Title 18, Chapter 18.18 "Erosion and Sediment Control."

18-1 CONSTRUCTION RUNOFF COMPLIANCE

- A. **NPDES Regulations/MS4 Permit Compliance.** All construction (including land clearing, etc.) shall be covered under the NPDES regulations per the State Water Resources Control Board (SWRCB) if the project site disturbs one acre or more of soil. These regulations require applicants to address proper implementation of pollution prevention measures throughout the site on a regular/routine basis. In addition, the San Diego Regional Water Quality Control Board issued the MS4 state permit, which establishes and places pollution prevention measures/requirements on developments so that discharged pollutants do not cause a violation (or a contribution to an exceedance) of water quality standards/objectives in local watercourses. Pollutants shall be reduced to the Maximum Extent Practicable (MEP). All construction in the City shall comply with the NPDES regulations/MS4 permit, as applicable.
- B. **Standard City Regulations for Construction Activities.** Construction, grading and encroachment related projects shall comply with this Manual, the Code, the City's current Construction, Grading and Encroachment Ordinance, all applicable City ordinances, permits, local requirements and standard notes (Grading, Paving, General and Erosion and Sediment Control) at all times.

18-2 EROSION AND SEDIMENT CONTROL

All private and public storm water conveyance systems, sidewalks, public rights-of-ways, etc. shall be protected from pollutant discharges and maintained in a neat and clean condition free of sediment, construction material, waste, miscellaneous debris and deteriorated erosion and sediment controls.

A. **Erosion and Sediment Control.**

1. **Erosion Control.** Erosion control is stabilization that protects soil (anything that keeps soil in place); it is a source control practice that prevents or mitigates soil from washing/blowing away by natural causes (rainfall, wind, gravity, etc.).

2. Sediment Control. Sediment control is any practice (or means) that captures soil after it has been displaced; it relies on filtering and/or settling the soil out of its transportation means.

B. Erosion and Sediment Control Measures/Standards.

1. Erosion and Sediment Control Measures. Proper erosion and sediment control (ESC) measures shall be designed and implemented to manage storm water and non-storm water discharges from the site at all times in accordance with this Manual, the Code and all state and federal requirements.
2. Erosion and Sediment Control Standards. California Stormwater Quality Association (CASQA) is a task force - a group of local professions (governments, businesses, other organizations, etc.) interested in water quality management that includes designing, funding, implementing and evaluating stormwater programs. For ESC measures/standards, CASQA's California Stormwater Construction BMP Handbook shall be referenced to and utilized in identifying functional and practical erosion and sediment control measures/standards for planning and design in the City of Temecula. The following website may be used for downloading information: www.cabmphandbooks.com. The handbook is structured around the State Water Resources Control Board's (SWRCB) General Permit.

C. Erosion and Sediment Control Plan. Per Section 6-1 C of Chapter 6 of this Manual, as part of the grading submittal package, an ESC plan is typically submitted to the City Engineer for review and approval. This plan shall minimize the deposition of sediment from grading activities (on private sites/lots, private and public streets, etc.) to adjacent properties and/or public roadways.

1. Content of an Erosion and Sediment Control Plan. The ESC plan shall be submitted on a standard 24" x 36" (D size) bond copy for review. It shall have a maximum scale of one inch equal to 100 feet (1"=100') and shall include the City's standard title block and applicable standard notes (Appendix F). All final drawing sheets shall be submitted on mylar. The erosion and sediment control plan shall include, but not be limited to, the following:
 - a. Existing and proposed: topography (with contour intervals), drainage areas and runoff patterns; (existing features shall be shown as faded dash lines; proposed features as solid bold lines);
 - b. Location and nature of existing sensitive areas (wetlands, creeks, etc.);
 - c. Exact placement and location of all erosion and sediment control BMP measures including spacing, alignment, typical details, slope protection and other measures to protect all disturbed portions of the property and adjacent properties from sedimentation deposition, if applicable, in accordance with Section 18.18.040 "Erosion and Sediment Control Systems" of the Code;
 - d. Information on each ESC measure (typical details, specifications, cross-sections, vegetation establishment specification, quantities, etc.);
 - e. Access to all erosion and sediment control facilities; and how the access shall be maintained during inclement weather;
 - f. Access/entrance(s) to the site shall be shown. The responsibility for field design to meet site conditions and maintenance of the site entrances shall be the responsibility of the property owner/contractor. If there is any dirt or mud tracking onto the streets, the contractor shall be responsible for the cleaning of this condition.
 - g. BMP measures associated with faces of cut/fill slopes to control erosion and provide stability, if applicable;
 - h. Erosion and sediment control standard notes and applicable standards;

- i. Name, address and signature of the civil engineer or other legally responsible person, who prepared the plan;
 - j. Waste Discharge Identification (WDID) Number issued by the State Water Resource Control Board (SWRCB), the Risk Level Determination Number and the qualified Storm Water Pollution Prevention Plan (SWPPP) Developer (QSD), if applicable;
 - k. Gross vs. net (disturbed) acreage; and
 - l. Legend showing symbols, descriptions and BMP quantities associated with each BMP.
2. Approved Erosion and Sediment Control Plans. A copy of the approved erosion and sediment control plans shall be maintained and made available at the work site at all times. A working set of approved plans shall be routinely and frequently modified and updated to ensure effective erosion and sediment control throughout the duration of the project. The City reserves the right to require updates, deletions and other modifications to the plans.
- D. Drainage/Watercourses. The erosion and sediment control provisions shall take into account existing and proposed drainage patterns during all grading phases and shall include, but not be limited to, directing drainage away from the edge of top of slopes. Watercourse protection shall include, but not be limited to, stabilization of channels at all times; this protection shall be conducted after applicable regulatory agency(ies) approval for work in the channel has been obtained.
- E. Erosion and Sediment Control Maintenance. The permittee shall be responsible for **continual maintenance** of the project site's erosion and sediment control measures for the entire duration of the construction activity. The measures shall remain in place and be maintained in satisfactory condition until all disturbed areas are permanently stabilized by installation and establishment of landscaping, mulch, etc. or are otherwise protected from erosion.

Necessary precautions shall be taken to prevent trespassing onto areas where impounded water creates a hazardous condition; proper signage shall be posted. At all times, the erosion and sediment control system shall be evaluated, revised and repaired, as needed, to ensure that it is free of sediment, construction materials/waste, debris and deteriorated erosion and sediment control devices.

If, at any time, the City Engineer determines that emergency work is necessary on the project site due to unmaintained erosion and sediment control systems, he may revoke the grading permit, as specified in Section 18.18.080 "Erosion and Sediment Control Maintenance." The maintenance of all erosion and sediment control systems shall be performed in compliance with this Manual, the Code and all state and federal requirements.

18-3 **BEST MANAGEMENT PRACTICES**

- A. Best Management Practices (BPM). BMPs are management practices and operating procedures/devices executed to prevent or reduce pollutant discharges into public or private storm water conveyance systems. BMPs can significantly reduce pollutant discharges from construction sites if properly implemented. The permittee shall implement the following BMPs at all construction sites, year round, and throughout the entire duration of each project:
- 1. Combination of erosion and sediment control measures to include, but not be limited to, the protection of: all storm drain conveyance systems (to prevent sedimentation from entering local waterways) and all stockpiles and construction materials. Note that effective ESC measures shall be implemented within seven working days of clearing a site or of inactivity in construction.

2. Proper sequencing of construction activities (minimize grading operations in raining season, implement BMPs taking local weather into account, etc.).
3. Slope stabilization to include, but not be limited to, the implementation of soil stabilization measures such as landscaping, mulching, soil binders, hydro-seeding, timely re-vegetation, geotextiles and mats, etc.
4. Retention and proper management of sediment and other construction pollutants onsite (minimize tracking of dirt, mud, etc. onto streets; provide sediment basins/traps, fiber rolls, gravel bag berms as necessary, etc.).
5. Preservation of natural hydrologic features, riparian buffers and corridors.
6. Maintenance of all source/treatment control BMPs at all times.
7. Additional supply of erosion and sediment control materials onsite for immediate use, if necessary, due to forecast rains and/or inclement weather.
8. Good site management housekeeping practices to include, but not limited to:
 - a. Provide functional concrete washout areas;
 - b. Perform consistent trash removals and proper waste disposal methods;
 - c. Clean up contaminated spills adequately;
 - d. Maintain construction equipment functional;
 - e. Manage dumpsters satisfactorily;
 - f. Conduct site inspections on a regular basis; and
 - g. Address deficiencies promptly and manage pollutants accordingly, etc.

B. BMP - Erosion Control. The following erosion control measures may be implemented as part of the construction work:

1. Erosion Control Devices. Temporary and/or permanent erosion control devices shall include, but are not limited to: applying and establishing vegetative cover; applying wood mulch, stapled or pinned blankets (straw, coconut or other); placing plastic sheeting (minimum 10-mil) and/or polypropylene mats; applying spray-on controls to all disturbed areas; and other measures, as approved by the City Engineer. ***Jute netting shall not be permitted*** as a stand-alone erosion control.
2. Slopes. For slopes greater than 4:1, provide a combination of fiber rolls and either a bonded fiber matrix product applied at a rate of 3500lb/acre or a stabilized fiber matrix product applied at a rate of 10 gallons/acre. The City may approve different application rates for slopes less than 4:1.
3. Dust Control. During the grading (clearing, moving soil, etc.) and construction phases, water trucks or equivalent shall be used to prevent dust from leaving the site.
4. Clean Public Improvements. All site areas and public improvements (streets, curb and gutters, sidewalks, parkways, etc.) shall be kept clear and clean of dust, debris and trash at all times. The flushing or washing of dirt and debris into storm drain systems is prohibited.
5. Temporary Site Vegetation. For erosion control purposes, all disturbed areas (after clearing the site) require enhanced erosion controls such as temporary site vegetation. The application of said vegetative coverage on all disturbed areas shall be in accordance with this Manual and the Code, unless otherwise approved by the City Engineer. Refer to Section 18.18.100 D of the Code.

Areas requiring vegetative coverage may also require the installation of an adequate sprinkler system in order to establish vegetation of the disturbed areas prior to release of securities associated with the grading permit. Vegetation shall consist of drought tolerant, self-germinating ground cover in order to protect the disturbed areas from erosion and instability.

C. BMP - Sediment Control. The following sediment control measures may be implemented as part of the construction work:

1. Sediment Control Devices. Temporary and/or permanent sediment control devices shall include, but are not limited to: desilting basins (designed according to the method provided in CASQA's Construction BMP Handbook), graded berms, fiber rolls, silt fences, gravel bag chevrons (filled with a minimum of ¾ inch gravel), check dams, drainage inlet protection, etc. Fiber rolls shall be installed in 15 feet increments measured along on the face of the slope. Silt fence shall be installed along interior streets and combined with gravel bags or silt fence chevrons inside the sidewalk right-of-way or back of curbs.
2. Routine Street Sweeping. Routine street sweeping shall be performed on all paved areas, construction exits, during hauling operations, on all haul route streets and any other location where tracking is observed. Vacuum sweepers shall be used when street sweeping becomes ineffective. Controlled street washing shall only be allowed prior to the application of asphalt seal coats and only when all pertinent drainage inlets are protected.

18-4 CONSTRUCTION INACTIVITY

A. Inactive Areas of Construction. Inactive areas of construction means areas of construction activity that are not active and those that have been active and are not scheduled to be re-disturbed for a prolonged duration. A prolonged duration is defined as seven days per the City Engineer. Prior to a site becoming inactive, the following is required:

1. The engineer of record or permittee shall be responsible for submitting written notification to the City that construction activities will cease prior to completing the work associated with the approved grading plan;
2. The engineer of record shall validate or revise the erosion and sediment control plan and BMP implementation program based on the current site conditions; and
3. The engineer of record shall prepare and submit a BMP implementation plan (for all disturbed areas) that demonstrates compliance throughout the expected period of inactivity and establishment of 100% vegetative coverage as the primary erosion control.

18-5 ADDITIONAL NPDES REQUIREMENTS

A. Requirements. In accordance with Section 18.18.140 "Additional NPDES Requirements" of the Code, the State Water Resource Control Board has outlined waste discharge requirements in the Construction General Permit for projects disturbing, exposing and stockpiling one acre or more of soil, or disturbing less than one acre but are part of a larger common plan of development or sale of one or more acres of disturbed land.

Prior to issuance of a grading permit for sites meeting these criteria, each applicant shall provide proof of coverage in the form of an active Water Discharge Identification number and risk level determination to the City Engineer.

The San Diego Regional Water Quality Control Board requires that the following documents be maintained up-to-date at the construction site throughout the project duration:

1. Storm Water Pollution Prevention Plan (SWPPP)
2. Rain Event Action Plans
3. Construction Site Monitoring Program Plan
4. City approved Erosion and Sediment Control Plan

B. Resources. The Construction General Permit, fees, Storm Water Pollution Prevention Plan requirements and permit registration document requirements can be downloaded at:

www.waterboards.ca.gov/water_issues/programs/stormwater/construction

The SWPPP guidelines can be downloaded at: www.cabmphandbooks.com.

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Chapter 21 - INSPECTIONS

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Inspections ensure that construction conforms to approved project plans and specifications as well as City and engineering standards. They are typically performed for excavation operations, placement of forms for concrete work, drainage structures, paving operations, etc. for both onsite development and public rights-of-way improvements. This chapter describes the various required Public Works inspections, which include, but are not limited to: grading, concrete or gunite drainage devices, National Pollutant Discharge Elimination System (NPDES)/Water Quality Management Plan (WQMP) facilities, wet/dry utilities, driveways, paving and final inspections. Refer to the Temecula Municipal Code, Title 18, Chapter 18.21 "Inspections for Construction, Grading and Encroachment Work."

21-1 GENERAL REQUIREMENTS

In order to comply with inspection requirements, note the following:

- A. **General.** Construction or work for which a permit is required shall be subject to inspection by the City Engineer and such construction or work shall remain accessible and exposed for inspection purposes until approved. The applicant shall be liable for expenses entailed in the removal or replacement of any material required to allow for proper inspection.
- B. **Inspection Coverage.** This Manual covers inspections for all City development to include onsite development and public rights-of-way improvements. For onsite development, site inspections shall be tied to a specific grading permit, its associated grading plan and subsequent, building permit, if applicable. For public rights-of-way improvements, site inspections shall be tied to a specific encroachment permit and its associated construction plans.
- C. **Initial Inspection.** Prior to approval of any construction and/or grading or building plans and specifications (if applicable), the City Engineer shall inspect the site to determine that the plans and specifications are current and reflect existing conditions.
- D. **Notification of Utility Work.** The permittee is required to notify the City Engineer of any utility work scheduled to be performed on or offsite and within public rights-of-way. This information will allow the City Engineer to determine the impacts of said utility work to other associated work to be inspected by the City Engineer.
- E. **Pre-Construction Meeting.** Prior to any construction, grading (brushing and/or land clearing) and/or encroachment, there shall be a pre-construction meeting held at a location specified by the City. The permittee, or his agent, shall notify the City at least two working days prior to requesting a pre-construction meeting and shall be responsible for notifying all persons responsible for the construction, grading and/or encroachment related operation.
- F. **Pre-Paving Meeting.** Prior to placement of curb and gutter or of pavement base material, there shall be a pre-paving meeting held on the site, as specified by the City. The permittee, or his agent, shall notify the City at least two working days prior to requesting a

pre-paving meeting and shall be responsible for notifying all persons responsible for the paving related operation.

- G. Inspection Requests.** Prior to scheduling inspections, the work, as shown on the approved plan, must be 100% complete and the site must be ready for inspection. Public Works inspections shall be scheduled by calling the **Public Works Inspection Line at (951) 308-6395**. Inspections must be requested by no later than **3:30 pm** the day prior to the requested date of inspection. More than one inspection may be requested per call (placing base for the week), but they must be specific and all relevant information provided. Typical requests for site inspections include:
1. Rough Grading. Rough grading site inspections shall be conducted and cleared, prior to building permit releases (for private development).
 2. Final Grading. Final grading site inspections shall be conducted and cleared, prior to occupancy releases (for private development).
 3. Grading. Grading inspections may include excavation and fill, backfill of utility trenches, swales, compaction, etc.
 4. Concrete. Concrete inspections may include ribbon gutters, sidewalks, curbs, curb and gutters, driveway approaches, concrete or gunite drainage devices, etc.
 5. Drainage. Drainage inspections may include storm drains, catch basins, under sidewalk drain pipe, other drainage devices, etc.
 6. NPDES. NPDES inspections may include erosion and sediment control measures, BMP's, etc.
 7. Paving. Paving inspections may include subgrade, base, asphalt concrete, asphalt concrete berms, concrete, etc.
- H. Other Inspections.** The City Engineer is authorized to make or require other inspections of any construction work to ascertain compliance with provisions of this Code and other laws that are enforced by the Department of Public Works.

21-2 GRADING INSPECTION

This section covers work that the geotechnical engineer is responsible to approve/certify prior to City inspection as well as general and rough grading inspections that the City shall perform.

A. Grading/Geotechnical Engineer Oversight. This oversight is required as follows:

1. Canyon Cleanout. After all brush and unsuitable material has been removed and an acceptable base has been exposed, but before any fill is placed. Canyon cleanouts are to be approved by a geotechnical engineer, prior to City inspection.
2. Toe Bench and Key. After the natural ground or bedrock is exposed and prepared to receive fill, but before fill is placed. The toe bench and key are to be approved by a geotechnical engineer, prior to City inspection.
3. Over-Excavation. After the area has been excavated, but before fill is placed. Over-excavation is to be approved by a geotechnical engineer, prior to City inspection.

The City shall confirm that the geotechnical engineer's oversight was conducted accordingly and in compliance with City and engineering standards.

B. General Grading Inspection. The City Engineer shall conduct grading inspections as follows:

1. Excavation. After the fill has started, but before the vertical depth of the excavation exceeds 10 feet; and every 10 foot interval thereafter.
2. Fill. After the fill has started, but before the vertical height of the fill exceeds 10 feet; and every 10 foot interval thereafter.

C. Rough Grading Inspection. For onsite development, rough grading inspections shall be performed prior to issuance of building permit. (Refer to Appendix R.) The following items must be presented to the City Engineer at the scheduled inspection:

1. The Pad Elevation Certification (rough grade certification). Refer to Appendix S.
 - a. The engineer of record must submit written certification attesting to precise conformance to line and grade and proper excavation and preparation of all areas ready to receive concrete structures, including all drainage devices, to be built under the grading permit.
 - b. All sub-drains, slope drains, manufactured slopes, berms, positive building pad drainage and all retaining walls shall be in place and approved as a condition for rough grading approval.
2. The Pad Compaction Certification/Report (final geotechnical/soils report).
 - a. The geotechnical engineer shall submit a final geotechnical report (certifying the grading) and successful compaction test results.
 - i. This report shall be prepared by a geotechnical engineer and typically includes: (a) type of field testing performed, (b) suitability of utility trench and retaining wall backfill, (c) summaries of field/lab tests, and other substantial data and (d) comments on any changes made during grading.
 - ii. Each field density test shall be identified on a plan. Include the elevation of the test, the test method for in-place density. American Society for Testing and Materials Standards or the approved equal shall be so noted.
 - iii. The geotechnical engineer shall provide written approval as to the site's adequacy for the intended use and a statement of compliance to finish grade. Such approval may consist of a series of reports at various stages of construction.
 - b. A geologic report *may be* required. If so, this report shall be prepared by the engineering geologist and shall include: (a) final description of the geology of the site including any new information disclosed during the grading and (b) the effect of same on recommendations incorporated in the approved grading plan. He shall provide written approval as to the site's adequacy for the intended use, a statement of compliance to finish grade, and when required by the City Engineer, shall submit an as-graded geologic map.

This report, if applicable, must be submitted, prior to obtaining rough grade clearances.

21-3 CONCRETE OR GUNITE DRAINAGE DEVICES INSPECTION

Inspections for concrete or gunite drainage devices may occur for both onsite development and public rights-of-way improvements. The following inspections are required:

A. Ribbon Gutter and/or Concrete Swale.

1. Subgrade. After subgrade is prepared and required reinforcement placed; and
2. Concrete. During concrete placement.

B. Curb and Gutter.

1. Subgrade. After subgrade is made, forms in place (i.e., control string or wire for slip form) with required reinforcement and compaction testing complete, compaction report available; and
2. Concrete. During concrete placement.

C. Terrace Drains, Down Drains and Brow Ditches.

1. Subgrade. After grade is made, but prior to placement of welded wire mesh or reinforcing steel and with Soil Engineer approval;
 2. Reinforcement. After thickness control wire and reinforcing steel or welded wire are in place; and
 3. Concrete. During concrete or gunite placement.
- D. Other Drainage Devices.** Inspections for other drainage devices require the following:
1. Sub-Drains.
 - a. After excavation but prior to placement of filter material and pipe. The sub drainpipe and filter material shall be on-site for inspection.
 - b. After filter material and sub drain has been placed, but prior to covering with backfill and verification that geotechnical engineer has as-built elevations and locations.
 2. Storm Drains, Catch Basin and Inlets.
 - a. All excavation of trenches and trench shoring shall be performed in compliance with the conditions of the most current California Occupational Safety and Health Act (Cal OSHA) Construction Safety Orders, Article 6; Section 1541 and Section 1541.1, inclusive.
 - b. All storm drains, catch basins and inlets shall be constructed with proper bedding in compliance with Section 306-1.2.1 of the most current GreenBook Standards.
 - c. After placement of storm drains, but prior to covering with backfill, the engineer of record shall provide written certification indicating precise conformance to line and grade on any storm drain being placed flatter than two percent grade;
 - d. After placement of catch basin/inlet forms and reinforcement steel prior to placement of concrete, the engineer of record shall provide written certification indicating precise conformance to line and grade of all structures.
 - e. All storm drains, catch basins and inlets shall be constructed per City and engineering standards as well as applicable RCFC&WCD standards.
 3. Earth Swales.
 - a. Prior to rough grading approval, storage of combustible materials or lumber drop; and
 - b. Prior to final grading approval.

21-4 **SEDIMENT CONTROL FACILITIES INSPECTION**

As it relates to sediment control facilities, the City inspections include, but are not limited to, the following items listed below. Note that the applicant is responsible to adhere to and comply with all NPDES MS4 permit requirements and inspections.

- A. Prefabricated Devices.** After excavation of desilting basins, but prior to fill placement, prefabricated devices are to be available onsite for inspection.
- B. Fill Placement.** After fill placement for desilting basins, but prior to placement of concrete or other non-erosive materials.
- C. Erosion & Sediment Control Measures.** Prior to the beginning of any grading operations, all erosion and sediment control measures must be in place and approved by the City.
- D. Construction Phasing Measures.** Every phase of construction shall have appropriate BMPs installed and maintained.

21-5 **WET/DRY UTILITY INSPECTION**

- A. Wet Utility Inspection.**

1. Public Rights-of-Way.
 - a. The applicable utility agency shall inspect their facilities to include pipes, structures, cleanouts, etc.
 - b. Public Works shall inspect all trench work (backfilling and compaction) for utilities and structures, etc.
 2. Onsite (Private) Development.
 - a. Building & Safety shall inspect utility laterals from the right-of-way to within the building envelope.
 - b. Public Works shall inspect all trench work (backfilling and compaction) for utilities and structures, etc.
- B. Dry Utility Inspection.**
1. Public Rights-of-Way.
 - a. The applicable utility agency shall inspect their facilities to include pipes/conduit, structures, vaults, etc.
 - b. Public Works shall inspect all trench work (backfilling and compaction) for utilities and structures, etc.
 2. Onsite (Private) Development.
 - a. For gas and electric, Building & Safety shall inspect utility conduit from the right-of-way to within the building envelope. Note that there are some exceptions to gas inspections (where the gas company performs the inspection), depending on meter location. The applicant shall consult with Building & Safety and the gas company for clarification.
 - b. For cable, phone, FIOS, etc., the respective utility agency shall inspect their facilities to include pipes/conduit, structures, vaults, etc.
 - c. Public Works shall inspect all trench work (backfilling and compaction) for utilities and structures, etc.
- C. Notification of Utility Work.** The permittee shall be responsible for scheduling and coordinating the necessary tasks to ensure that the City is present to perform the proper inspections on all noted utility installations.

21-6 **DRIVEWAY INSPECTION**

The following shall be adhered to for driveway approach and driveway inspections:

- A. Driveway Approach Inspection in Public Rights-of-Way.** The City shall inspect all driveway approaches within public rights-of-way to ensure compliance with approved plans, City and engineering standards.
- B. Onsite Driveway Inspection.** Onsite driveway inspections shall be required as follows:
 1. Subgrade. After subgrade is prepared and required reinforcement is placed;
 2. Utility Placement. During utility conduit/structure placement for verification of trench backfilling and compaction.
 3. Concrete. After placement of forms and required reinforcement is placed; and during concrete placement.
- C. Notification of Utility Work.** The permittee shall be responsible for scheduling and coordinating necessary tasks to ensure that the City is present to perform inspections on all noted utility installations, as they relate to driveways and driveway approaches.

21-7 PAVING INSPECTION

For both private and public rights-of-way improvements, paving inspections shall be required as follows:

- A. **Approved Street Plans.** Prior to any paving inspection, the soils engineer shall supply the City with an approved street section and certification of base material to be used.
- B. **Subgrade.** Inspection is required after subgrade has been established, tested and approved by the geotechnical engineer or his qualified representative. He shall leave a field memo of the compaction test results onsite. The engineer of record shall provide written certification indicating precise conformance to line and grade.
- C. **Base.** Inspection is required after base course has been placed, tested and approved by the geotechnical engineer or his qualified representative, but prior to soil sterilizer and asphalt placement. He shall leave a field memo onsite providing compaction test results. Material delivery tickets shall be required. The engineer of record shall provide written certification indicating precise conformance to line and grade.
- D. **Utility Agency Clearance Required.** After completion of the curb and gutter improvements and prior to paving certification, clearance letters from all affected utility companies shall be submitted to the project inspector.
- E. **Asphalt Concrete.**
 - 1. **Continuous inspection.** During asphalt placement (to verify compliance with plans and specifications), continuous inspection shall be provided by an approved testing agency, retained by the owner or geotechnical engineer of record, or its qualified representative. Material delivery tickets shall be required.
 - 2. **Water Tested.** Prior to application of seal coat, the paved surface shall be water tested to reveal any irregularities and shall be patched, where required. Material delivery tickets shall be required after placement of seal coat.

21-8 FINAL INSPECTION

Final inspections shall be required for both onsite and public rights-of-way improvements. The permittee shall request a final inspection upon completion of all work, including installation of all drainage structures and other protective devices, submittal of all utility/agency approvals and required reports. An as-built plan may be required if, in the opinion of the City Engineer, the finished site differs significantly from the approved grading plan.

- A. **Final Inspection for Occupancy Release.** For onsite development, final inspections are performed prior to occupancy to ensure compliance with approved plans, City and engineering standards. Refer to Appendix T for guidelines. The following items must be presented to the City Engineer, upon arrival to the scheduled inspection:
 - 1. **For Tracts,** engineering certification of each lot (certs for swales, pad elevations, etc.).
 - 2. **For all non-residential projects,** engineering certification for each lot (certs for WQMP compliance, installation of required WQMP systems/BMP's, swales, pad elevations, etc.)
 - 3. **For custom single family and non-residential projects,** pad compaction certification/final soils report.
 - 4. If applicable and requested by the City Engineer, a record drawing shall be submitted. It shall be submitted electronically (prepared on a compact disc) and in mylar form, and shall be signed and dated by the engineer of record. The drawing shall include original and as-graded ground surface elevation, pad elevation, slope ratios, elevations and

locations of all surface and subsurface fills, sub-drains and general location and depth of all areas of removal of unsuitable soil.

5. If applicable, supplemental soils and geologic reports for all work done subsequent to rough grade approval.

These reports, if applicable, must be submitted to the City Engineer prior to occupancy clearances.

Note: It is the ***responsibility of the permittee*** to obtain clearances from RCWD and EMWD. Proof of such clearances shall be provided to the City, prior to obtaining Public Works' clearance to allow for issuance of a Certificate of Occupancy.

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Chapter 24 – FEES AND SECURITIES

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The posting of securities for construction, grading and encroachment related work is required to ensure that the work, if not completed in accordance with the approved plans, will be corrected to eliminate any deficiency or hazard created by the work or its lack of maintenance. This chapter describes the various required fees associated with construction (plan checking, permit, inspection, soils report review, etc.) and securities (surety bond, cash deposit, letter of credit or a combination thereof) associated with both onsite and public rights-of-way improvements. Refer to the Temecula Municipal Code, Title 18, Chapter 18.24 "Fees and Securities."

24-1 PLAN CHECKING

All plan checking fees for construction, grading and encroachment related work for each site shall be in conformance with the City's current Fee Schedule, established by resolution(s), and shall be collected **prior to** accepting the submittal of application, plans and required supporting documentation for review.

- A. **Plan Checking Fees.** Plan checking fees shall be paid for activities including, but not limited to:
 - 1. Onsite Development. Clearing, grading, subdivision precise grading, onsite improvements, etc.
 - 2. Public Rights-of-Way Improvements. Offsite improvements, traffic control plans, etc.
 - 3. Engineering Documents/Studies. Legal documents, final map checking, Federal Emergency Management Act studies, hydrology studies, geotechnical/soils reports, traffic impact analysis, Water Quality Management Plans, etc.
 - 4. General Plan Checking. Modifications/plan revisions, 4th and subsequent reviews, etc.
- B. **Expired Applications.** Grading and encroachment permit applications, which commenced the plan checking stage, for which no permit is issued within 180 days of the date of application shall be considered "expired" applications. In order to renew the application after expiration, the applicant shall resubmit the grading submittal package and pay the most current plan check fees. The fee for renewing an expired application submittal shall be as specified in the City's current Fee Schedule and in Sections 18.06.140 and 18.12.100, "Expiration and Renewal of Grading/Encroachment Application Submittals" of the Code.
- C. **Plan Checking Fee Refunds.** After submittal and commencement of processing by the City, no plan checking fee collected, pursuant to this Manual and this Code, shall be refunded in whole or in part. Refer to Section 18.24.080 "Refunds" of the Code.

24-2 PERMITS

- A. **Permit Fees.** Grading, haul route and encroachment permit fees for each project site shall be paid to the City Engineer in conformance with the City's current Fee Schedule, established by resolution(s), and shall be collected **prior to** issuance of permit.

- B. Expiration and Renewal of Permits.** Expiration and renewal of issued permits shall be in conformance with Sections 18.06.160 and 18.12.120 "Expiration and Renewal of Issued Grading/Encroachment Permits" of the Code. A permit shall be valid for 180 days from the date of issuance. If a permit expires and the work is not complete, the applicant shall apply for a permit extension. Plan check fees covering initial submittals shall be forfeited for all expired permits. All permit extensions shall be subject to a "Permit Issuance Fee" and additional fees (as described in section C below) in accordance with the City's current Fee Schedule.
- C. Permit Extension Fees.** As a condition of the permit extension of any time period, the City Engineer may require the payment of additional permit, plan checking, inspection and/or soils review fees required: (1) to cover the administration of the extensions and/or increased costs to the City and (2) to bring the project into conformance with any fee schedule in effect at the time of extension. Said fee shall be paid to the City Engineer in conformance with established resolution(s) and the City's current Fee Schedule, and shall be collected **prior to** issuance of permit extensions.
- D. Additional Work.** The fee for additional work under an existing permit shall be computed by using the City's current Construction Security Worksheets (cost estimate forms) and the City's current Fee Schedule.

The fee for additional work shall be the difference between the fee paid (for the original permit) and the fee calculated for the entire project (per the current Fee Schedule). No allowance for refunds (due to reductions in unit costs, etc.) shall be permitted.

- E. Failure to Pay Fees.** Failure to pay fees and obtain the permit before commencement of work shall be deemed a violation of this Manual and the Construction, Grading and Encroachment Ordinance, except as determined by the City Engineer in accordance with Section 18.24.040 "Permits" of the Code.

In accordance with the Code and California Building Code, Chapter 1 "Scope and Administration," Section 109 "Fees," Subsection 109.4 "Work commencing before permit issuance," such a violation shall be subject to an assessment of double permit fees that shall be in addition to the required permit fees for work done prior to permit issuance. Payment of said fee shall not relieve any person from fully complying with the requirements of this Manual and this Code.

24-3 INSPECTIONS

- A. Inspection Fees.** Inspection fees required for work covered by pending permits shall be assessed in conformance with the City's current Fee Schedule, established by resolution(s), and shall be collected **prior to** issuance of permit.

Inspection fees shall be paid for activities including, but not be limited to: clearing, grading, onsite/offsite improvements and Water Quality Management Plans in accordance with the City's current Fee Schedule.

- B. Potential "Hourly Rate" Fees.** For projects where the actual inspection time exceeds the originally calculated (and paid) inspection time due to unforeseen project site conditions and/or excessive duration of project beyond the reasonably anticipated project duration, the City Engineer may seek additional fees to recover the costs associated with providing additional inspection services by charging hourly rates. Said hourly rates shall be based on the staff member(s) performing the work. The recovered costs shall be the difference between the original inspection fee paid and the inspection costs calculated for the actual

time spent by inspector(s) based on applicable hourly rates. Said fee shall be paid to the City Engineer in conformance with established resolution(s) and the City's current Fee Schedule.

- C. Fees for Premature Inspection Requests.** At times, inspection requests are processed prior to the job being ready for such an inspection. When any premature inspection is requested due to the negligence of the permittee, his agent or other responsible persons or due to failure of said persons to comply with previous correction instructions and processed, a fee shall be collected to recover City costs. Said fee for each such premature inspection request shall be paid to the City Engineer in conformance with established resolution(s) and the City's current Fee Schedule, and shall be collected **prior to** conducting any further inspections on the project.

This subsection is not to be interpreted as requiring re-inspection fees the first time a job is rejected for failure to comply with the requirements of this Manual, but as to control the practice of calling for inspection **before** the job is ready for such inspection.

- D. Inspection Fee Refunds.** After submittal and commencement of processing by the City, no fee collected, pursuant to this Manual and this Code, shall be refunded in whole or in part, except:
1. A portion of the inspection fees may be refunded at any time prior to the start of the work authorized by the permit, upon the applicant's written request, provided the permit application has expired or has been withdrawn. The refundable portion of the inspection fees shall be the total amount less any City expenses incurred (including a reasonable overhead charge).

However, no refunds shall be made for reasons noted in Section 18.24.080 "Refunds" of the Code.

24-4 REVIEW OF GEOTECHNICAL REPORT FEE

Before accepting a geotechnical (soils) report for review, the City Engineer shall collect a report review fee. Said fee shall be paid to the City Engineer in conformance with established resolution(s) and the City's current Fee Schedule, and shall be collected **prior to accepting the report** for review. A separate fee will be charged for each individual report submitted for review.

24-5 SECURITIES

A permit shall not be issued until the permittee first posts a security and enters into an agreement with the City to ensure that the work (to include grading, drainage, erosion and sediment control measures, etc.) is performed timely and in accordance with all City and engineering standards, this Code and all state and federal regulations.

The posting of the security shall be as specified per the Temecula Municipal Code, Title 18 and/or as directed by the City Engineer. The permittee shall be required under the terms of said agreement to furnish a corporate surety bond for the faithful performance of the agreement. The purpose of the security is to ensure that the work, if not completed satisfactorily, will be completed and/or corrected to eliminate any deficiencies created by the work. Refer to the following:

- A. Security for Commercial/Industrial/Residential Subdivisions Involving Public Rights-of-Way Improvements.**
1. Total Security Amount. The security/deposit amount shall be:
 - a. 150% of the cost of the public rights-of-way improvements and

b. 100% of the cost to set monumentation.

2. **Security Options.** Security shall be submitted in the form of a ***bond, cash/certificate of deposit or a letter of credit***. These improvement securities are required by the Subdivision Laws and approved by the City Attorney; and they secure the Subdivision Improvement Agreement as well as the Subdivision Monument Agreement.

By executing the Subdivision Improvement Agreement, the developer agrees to install and complete, at his expense, all public improvements required by the City in connection with the proposed project. In addition to submitting said agreement, refer to the following security options/requirements below:

a. **If securing with bonds, submit:**

- i. **Faithful Performance Bond.** To ensure faithful performance of the agreement to said improvements, this bond amount shall be **100%** of the estimated cost of the improvements.
- ii. **Labor and Materials Bond.** To ensure secure payment to any contractor, subcontractor, persons renting equipment or furnishing labor materials for the required improvements pursuant to the agreement, this bond amount shall be **50%** of the estimated cost of the improvements.
- iii. **Subdivision Monument Bond, if applicable.** To ensure the setting of monumentation pursuant to the agreement, this bond amount shall be **100%** of the estimated cost to set monumentation.
- iv. **Subdivision Monument Agreement, if applicable.** By executing this agreement, the developer agrees to install and complete, at his expense, all monumentation required by the City in connection with the proposed project.

Note: Securing public improvements with bonds is the most commonly used option; refer to Appendix U for applicable agreement and bond forms.

b. **If securing with cash, submit:**

- i. Cash; Cash Deposit Agreement for Street Improvements; and
- ii. Cash; Cash Deposit Agreement for Monumentation and Subdivision Monument Agreement, if applicable.

c. **If securing with a certificate of deposit, submit:**

- i. Certificate of Deposit; Certificate of Deposit Agreement for Street Improvements; and
- ii. Certificate of Deposit; Certificate of Deposit Agreement for Monumentation and Subdivision Monument Agreement, if applicable.

d. **If securing with a letter of credit, submit:**

- i. Letter of Credit (for Street Improvements and Monumentation) and Subdivision Monument Agreement, if applicable.

B. Security for Commercial/Industrial Projects - Private Development.

1. **Total Security Amount.** The security deposit amount shall be:

20%*	of the cost of the earthwork volume, (the greater of cut or fill, at the designated cost per cubic yard) plus \$2.00 per cubic yard for each cubic yard in excess of 1,000; plus
50%*	of the cost of the private drainage improvements (non-City maintained); plus
100%	of the total estimated cost of the erosion and sediment control system (including pre and post WQMP facilities).

* Note that the security deposit amount may also be increased by the City Engineer up to: (1) 100% (vs. 20%) of the cost of the total earthwork volume; and (2) 100% (vs. 50%) of the onsite private drainage improvements, if the potential hazards or the nature of the project, in the opinion of the City Engineer, justifies such an increased amount.

2. Security Deposit in Cash. Of the total security amount, the City Engineer will require a portion of it to be ***in cash*** to satisfy the cost of correcting any deficiency or hazard created by the work or in violation of the conditions of the permit or the Code. The cash deposit requirement is as follows:
 - a. Minimum. \$5,000 or 50% of the total estimated cost of the erosion and sediment control system, ***whichever is greater***. (Note: At the discretion of the City Engineer, if the project site is complex in nature or a high risk such as adjacent to a blue line stream, etc., the minimum shall not be applicable.)
 - b. Maximum. \$50,000
3. Remaining Security. The remaining security amount shall be submitted in the form of a ***bond or a letter of credit***.

The "Grading and Erosion & Sediment Control" Agreement is an agreement whereby the developer agrees to perform certain improvements within the City as described in the grading permit in connection with the proposed project. In addition to submitting this agreement, refer to the following security options below.

- a. If securing with bonds, submit:
 - i. Grading and Erosion & Sediment Control Bond. This secures the performance and labor & materials to cover the cost of the grading and erosion & sediment control work prior to issuance of permit. To ensure faithful performance and labor & materials responsibilities pursuant to the agreement, the bond amount shall be ***100%*** of the estimated cost of the grading and erosion & sediment control measures.

Note: Securing private development with bonds is the most commonly used option; refer to Appendix V for applicable agreement and bond forms.

- b. If securing with letter of credit. A letter of credit is another acceptable method of securing the improvements in connection with the proposed project.

At the discretion of the City Engineer, the developer may also post the full bond amount in cash or provide certificates of deposit in lieu of the noted securities above. If so, additional cash deposit/certificate of deposit agreements will be required.

Note: For some commercial and industrial projects, the project specifics may involve both private development as well as public improvements. The applicant shall be aware that securities noted in both Sections 24-5 A and B may apply.

C. Security for Single Family Residences – Private Development.

1. Total Security Amount. The security amount is based on ***100%*** of the total estimated cost of the erosion and sediment control system.

Note that the security amount may be increased by the City Engineer up to 125% of the costs of the erosion and sediment control system or may include the earthwork and drainage costs mentioned in section B above, if the potential hazards or the nature of the project, in the opinion of the City Engineer, justifies such an increased amount.
2. Security Deposit in Cash. Of the total security amount, the City Engineer will require a portion of it to be ***in cash***:
 - a. Minimum. \$3,000; (Note: At the discretion of the City Engineer, if the project site is complex in nature or a high risk such as adjacent to a blue line stream, etc., the minimum will not be applicable.)

b. Maximum. \$50,000

3. Remaining Security. The remaining security shall follow Section 24-5 B.3.

- D. **Cash Deposits.** Cash deposits do not release the obligation of the applicant or the surety to satisfy the cost of correcting the deficiency or hazard or injury created by the work. If the amount of the cash deposit is insufficient to satisfy said costs of the work performed by the City, the City Engineer may invoice the applicant in accordance with Section 18.24.120, "Cost Recovery Fees" of the Code.

If the applicant fails to pay such amount within five days from the date of the invoice and restore the cash deposit to its original amount, the City Engineer may revoke the permit until such fees and deposits are paid. Any unused portion of the cash deposits will be refunded to the applicant upon final completion of the work to the satisfaction of the City Engineer.

- E. **Term.** The term of each security deposit shall begin upon the date of permit issuance and shall remain in effect until the completion of the work to the satisfaction of the City Engineer.
- F. **Forms.** Every security deposit and agreement shall be made pursuant to the standard forms contained in Appendices U and V approved as to form by the City Attorney. Although the forms are included in said Appendix, the forms may be modified, as needed, at the discretion of the City Engineer, as approved by the City Attorney. It is the developer's responsibility to obtain the current form from the City Engineer for their use and execution.

- G. **Substitution of Bonds.** The posting of securities (bonds, letter of credit, etc.) is required for all development. Upon City Engineer approval, a substitute bond or letter of credit may be filed in lieu of any bond or letter of credit described in this section if it is suitable to ensure the completion of the work remaining to be performed. If any security is replaced by another approved security, the replacement shall be filed with City Clerk and, upon filing, shall be deemed to have been a part of and incorporated into a new agreement. Upon filing of a replacement security with City Clerk, the former security may be released.

Property ownership changes are not cause for the City to require bond substitutions. The City Engineer will require appropriate posting of securities only when new or revised entitlements are sought.

- H. **Warranty.** The developer shall warrant the work performed pursuant to any of the agreements noted above for a period of one year after final acceptance by City Council of the work and improvements against any defective work or labor done or defective materials furnished. If within the warranty period any work or improvement associated with the project fails to fulfill any of the requirements of the agreements, the developer shall immediately address the defects and repair and/or replace any defective or otherwise unsatisfactory part of the work.

24-6 **RELEASE OF SECURITY**

The security deposit required by Section 18.24.140 "Securities" of the Code (to guarantee performance of work authorized pursuant to the permit) shall be released upon acceptance of the work by the City Engineer and subject to the following provisions:

- A. **Release of Security for Public Improvements.** The security furnished by the subdivider shall be released in whole or in part. Refer to Appendix W for applicable guidelines and procedures. All releases are to be performed pursuant to the Subdivision Map Act, State Government Code and all applicable laws.

1. Point of Contact. All inquiries regarding the release of bonds shall be processed through the Permits Engineer of the Department of Public Works in the Land Development Division at **(951) 506-5190**.
 2. Release of Security Involving Another Agency. If the performance of the obligation for which the security is required is subject to the approval of another agency, the City Engineer shall not release the security until the obligation is performed to the satisfaction of such other agency. Such agency shall have two months after completion of the performance of the obligation to register its satisfaction or dissatisfaction. If, at the end of that period, it has not registered its satisfaction or dissatisfaction, it shall be conclusively deemed that the performance of the obligation was done to its satisfaction.
- B. Release of Security for Private Development.** The security furnished by the developer/applicant shall be released in whole. All releases are to be performed pursuant to City policies, procedures and all applicable laws. Refer below for guidelines and procedures.
1. Point of Contact. All inquiries regarding the release of securities for private development shall be processed through the Department of Public Works, Land Development Division.
 2. Full Release. The grading and erosion & sediment control security is eligible for full release upon final completion and issuance of the certificate of occupancy, subject to the provisions noted below:
 - a. The developer/applicant shall request a final inspection for Public Works' clearance for issuance of certificate of occupancy by calling the ***Public Works Inspection Line at (951) 308-6395***. The City will then schedule a final inspection.
 - i. If the City deems the work complete, the City will release the security to the developer/applicant. Note: The City may retain, from the security deposit submitted in cash, an amount sufficient to cover any related costs and reasonable expenses and fees (including reasonable attorney fees) incurred by the City in successfully enforcing the obligation secured.
 - ii. If the City deems the work incomplete, the developer/applicant shall pay associated fees for the premature inspection request per City resolution(s). The City will provide a punchlist of incomplete items to the developer/applicant. All outstanding punchlist items shall be completed to the satisfaction of the City Engineer prior to re-scheduling another site inspection.

Chapter 25 – NOT USED

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Chapter 26 – NOT USED

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Chapter 27 - APPENDICES

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<u>Appendix</u>	<u>Description</u>	<u>Refer to Chapter</u>
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**APPENDIX A “BUILDING PERMIT ISSUANCE POLICY FOR LOTS ON DIRT ROADS
AND ASSOCIATED AGREEMENTS”**



Building Permit Issuance Policy For Lots on Dirt Roads

UPDATED MAY 2009

- Temecula Municipal Code Chapter 15.16 requires an all-weather driving surface with a minimum A.C. thickness of 0.25 feet prior to building construction
- Dirt roads constitute a hazard to public health and welfare by reducing access by emergency vehicles, increasing their response times, and during periods of inclement weather can prevent their use entirely
- Dirt roads require a high degree of maintenance and are subject to erosion and damage during inclement weather
- Dirt roads exist within the City, but by issuing additional Building Permits on vacant parcels the situation worsens
- City Municipal Code Ordinance has required since 1994 that any second unit requires that paved access be provided
- State law required the adoption of the California Fire Code by local governments in 1995. Since then there shall be no deviation from the basic state law minimums which is to provide "All Weather Access" for all new habitable buildings

The City has determined that habitable structures having access from dirt roads presents a clear threat to the public health and safety due to a lack of reliable and/or timely access by emergency vehicles. In addition, the Temecula Municipal Code and the California Fire Code requires "All Weather Access" be provided prior to building construction of any structure. Allowing people to build individual dwelling units without making the road improvements as required of subdivision tracts continues to exacerbate this potentially life threatening problem. Once structures are built on these dirt roads, residents are typically hesitant to contribute to paved street improvements citing that they were allowed to build, but not understanding that it is not the City's responsibility to make the road improvements to enhance their property.

California Fire Code Chapter 5 also requires an acceptable water source be provided prior to construction. Underground utilities and drainage structures are much more expensive to install after road improvements are made. Although individual water tanks are permitted, they are not always practical and the cost is high and cannot be shared between properties. These other improvements should be considered at the time of road paving to maximize cost effectiveness.

With the above facts in mind, the following is effective immediately:

POLICY:

Prior to any Building Permit being issued by the City of Temecula, the applicant will make all required road improvements to provide all weather access both onsite and offsite to the nearest improved, acceptable paved intersection. It is also recommended that the parties consider any needed underground utilities and drainage structures to avoid compounding costs later.

This policy applies to all new habitable structures, or major additions which would increase the number of expected occupants (as determined by fixture counts/bedrooms per the Building Official). Exceptions to this are only for (1) non-habitable structures, i.e. barns, out buildings; (2) repairs, remodeling or additions to existing structures not to exceed 25% of the existing square footage of habitable space or 600 square feet, whichever is less; (3) replacement due to damage such as fire or flood, or where the structure is determined uninhabitable by the Building Official; and (4) an existing dwelling unit can be replaced once and built not to exceed 25% of the existing square footage of habitable space or 600 square feet, whichever is less.

In these cases, the applicant would be required to sign an agreement ("Agreement to Obtain Grading Permit For Lots on Dirt Roads Affecting Real Property") agreeing not to oppose and to participate in any future financing district formed to make the necessary road improvements.

The requirements/standards for these improvements are as follows:

ONSITE:

On-site driveways are to be built to provide all weather access for fire equipment and must support an imposed load of 80,000 pounds GVW. Residential driveways must normally be a minimum of 20' in width. Plans signed by a licensed California Civil engineer verifying these requirements must be submitted.

OFFSITE ROADS:

Public Roads – Intended for public acceptance:

Roads must be built to City of Temecula Public Rural Road Standard No. 104B. This includes a paved street section of 28' in a 60' Right-of-way, with a minimum structural section of 3"AC/6"AB, with actual section determined by a geotechnical report.

Private Roads – not offered for acceptance by the City of Temecula:

Roads that will not be offered for acceptance by the City of Temecula for purposes of maintenance are required to be a minimum of 28' wide. The road must be built to support an imposed load of 80,000 pounds GVW and designed and certified by a licensed California civil engineer. A road not intended to be accepted by the City will

only be acceptable for access purposes if an association of property owners is formed to ensure perpetual maintenance of the paved road.

RECORDED AT REQUEST OF AND
WHEN RECORDED RETURN TO:

CITY OF TEMECULA
Susan W. Jones, MMC
City Clerk
P.O. Box 9033
41000 Main Street
Temecula, CA 92589-9033

EXEMPT FROM RECORDER'S FEES
PURSUANT TO GOVERNMENT CODE
SECTIONS 6103 AND 27383

Space above this line for Recorder's Use Only

**AGREEMENT TO OBTAIN GRADING AND BUILDING PERMITS FOR LOTS ON
DIRT ROADS
AFFECTING REAL PROPERTY**

THIS AGREEMENT is made and entered into as of _____, 20____, between the CITY OF TEMECULA, a municipal corporation, hereinafter referred to as "City" and _____ hereinafter referred to as "Owner." In consideration of the mutual promises and covenants contained herein, the parties hereto mutually agree as follows:

Section 1. RECITALS. This Agreement is made and entered into with respect to the following facts, which are acknowledged as true and correct by the parties hereto:

Owner is the owner of real property located at _____, Temecula, California, which is more particularly described on Exhibit A, Legal Description, attached hereto and incorporated herein as though set forth in full ("Property").

A. Owner is desirous of obtaining approval of a Grading Permit _____ from the City to grade a _____ on the Property.

Owner is desirous of obtaining approval of a Building Permit _____ from the City to construct a _____ on the Property.

The General Plan along with City Improvement Standard Drawings classify streets and provide for construction standards, respectively that affect those streets dedicated to the City in the general area of Property.

B. The City has determined that habitable structures having access from dirt roads present a clear threat to the public health and safety due to a lack of reliable and or timely access by emergency vehicles. In addition, Section 503 of the California Fire Code 2007 Edition (Section 15.04.020 of the Temecula Municipal

Code) requires "All Weather Access" be provided prior to construction of any structure." In order to implement this provision, the City has adopted a "Dirt Road Policy." Allowing people to build individual dwelling units without making the road improvements as required of subdivision tracts continues to exacerbate this potentially life threatening problem. Once structures are built on these dirt roads, residents are typically hesitant to contribute to paved street improvements citing that they were allowed to build, but not understanding that it is not the City's responsibility to make the road improvements to enhance their property.

The Property consists of _____ Owner desires to _____ The City's Dirt Road Policy states that "an existing dwelling unit can be replaced once and built not to exceed 25% of the existing square footage of habitable space or 600 square feet, whichever is less. The City has determined that _____

C. At the request of the Owner and in order to fairly and equitably apply the Dirt Road Policy to the Property, the City is willing to permit the Owner to _____ subject to the conditions of this Agreement. Under these circumstances and upon execution of this Agreement, the City finds that the new home on the Property of _____ square feet complies with the City's Dirt Road Policy.

Owner warrants and represents that it is the sole owner of the Property and that no other person or persons hold any legal or equitable interests in the Property, including deeds of trust or liens.

Section 2. AGREEMENT TO ISSUE GRADING PERMIT. In consideration of the City issuing the grading permit and the building permit, as described in Paragraphs 1.B. and 1.C. above, the Owner agrees to comply with the following requirements in order implement the solution to the unique situation described in Paragraph 1:

A. Owner shall sign an Agreement to Participate in Assessment District Affecting Real Property for the construction of _____ in a form approved by the City Attorney.

B. Owner acknowledges and agrees that the City Council may establish an assessment district, community facilities district, bridge and thoroughfare fee district, or a similar fair and appropriate financing mechanism that may include the construction of _____ at some time in the future.

C. Owner acknowledges and agrees that the issuance of a grading permit does not obligate the City to construct the all weather access road or to establish an assessment district, community facilities district, bridge and thoroughfare fee district, or a similar fair and appropriate financing mechanism for the construction of _____.

D. (Add As Needed)

Section 3. GENERAL MATTERS.

A. **Integration.** This Agreement contains the entire understanding between the parties relating to the subject matter of this Agreement, all prior or contemporaneous agreements, understandings, representations and statements, oral or written, concerning the subject matter of this Agreement are merged into this Agreement and shall be of no further force or effect.

B. **Investigation.** Each party is entering into this Agreement based solely upon the representations set forth herein and upon each party's own independent investigation of any and all facts and legal research such party deems material. Each party warrants and represents to the other that it has had the opportunity to review this Agreement with legal counsel and financial consultants and to receive the advice of legal counsel, tax counsel and financial consultants prior to its approval and execution of the Agreement.

C. **Timing.** This Agreement shall be fully executed by all parties prior to and as a condition of issuance of a grading permit. Time is of the essence of each provision of this Agreement of which time of performance is a factor.

D. **Waiver.** Waiver by any party hereto of any term, condition, or covenant of this Agreement shall not constitute the waiver of any other term, condition, or covenant hereof.

E. **Binding Effect.** Of the covenants which have been established pursuant to this Agreement, the same shall be deemed to be covenants running with the land for the benefit of the City in carrying out its statutory responsibilities under California law and to enforce the provision of the Temecula General Plan and the Temecula Municipal Code. The covenants contained in this Agreement shall be binding for the benefit of the City and its successors and assigns, and such covenants shall run in favor of the City for the entire period during which such covenants shall be in force and effect, without regard to whether the City is or remains an owner of any land or interest therein to which such covenants relate.

This Agreement shall be binding upon the heirs, executors, administrators, successors and assigns of the parties hereto. This Agreement shall be recorded in the office of the County Recorder for the County of Riverside.

F. **Attorney's Fees.** If litigation is reasonably required to enforce or interpret the provisions of this Agreement, the prevailing party in such litigation shall be entitled to an award of reasonable attorney's fees, in addition to any other relief to which it may be entitled.

G. **Notices.** Any notices or other correspondence between the parties shall be sent to the following unless either party gives the other notice of a change of address:

CITY OF TEMECULA

, *City Manager*

P.O. Box 9033

41000 Main Street

Temecula, California 92589-9033

OWNER

Notice shall be effective upon personal delivery, delivery by courier service or three business days following deposit in the United States Mail, postage prepaid, certified.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed the day and year first above written.

CITY OF TEMECULA

City Manager

ATTEST:

Susan W. Jones, *MMC*
City Clerk

APPROVED AS TO FORM:

Peter M. Thorson
City Attorney

OWNER

Name: _____
Title: _____

ACKNOWLEDGMENT

State of California
County of Riverside

On _____, 20____, before me, _____,
personally appeared _____,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are
subscribed to the within instrument and acknowledged to me that he/she/they executed the same in
his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the
person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing
paragraph is true and correct.

Witness my hand and official seal.

[Seal]

SIGNATURE OF NOTARY

RECORDED AT REQUEST OF AND
WHEN RECORDED RETURN TO:

CITY OF TEMECULA
Susan W. Jones, MMC
City Clerk
P.O. Box 9033
41000 Main Street
Temecula, CA 92589-9033

EXEMPT FROM RECORDER'S FEES
PURSUANT TO GOVERNMENT CODE
SECTIONS 6103 AND 27383

Space above this line for Recorder's Use Only

AGREEMENT TO PARTICIPATE IN ASSESSMENT DISTRICT AFFECTING REAL PROPERTY

THIS AGREEMENT is made and entered into as of _____, 20____, between the CITY OF TEMECULA, a municipal corporation, hereinafter referred to as "City" and _____ hereinafter referred to as "Owner." In consideration of the mutual promises and covenants contained herein, the parties hereto mutually agree as follows:

Section 1. RECITALS. This Agreement is made and entered into with respect to the following facts, which are acknowledged as true and correct by the parties hereto:

a. Developer is the owner of real property (the "Property") located at _____, Temecula, California, which is more particularly described on Exhibit A, Legal Description, attached hereto and incorporated herein as though set forth in full ("Property").

b. Owner is desirous of obtaining approval of a Grading and/or Building Permit _____ from the City to grade and/or construct a _____ located at _____.

c. The General Plan along with City Improvement Standard Drawings classify streets and provide for construction standards, respectively that affect those streets dedicated to the City in the general area of Property.

d. Owner warrants and represents that it is the sole owner of the Property and that no other person or persons hold any legal or equitable interests in the Property, including deeds of trust or liens.

Section 2. CONSENT TO PARTICIPATION IN ASSESSMENT DISTRICT OR SIMILAR FINANCING MECHANISM. The City Council may establish an assessment district, community facilities district, bridge and thoroughfare fee district, or a similar fair and appropriate financing mechanism that may include the construction of Liefer Road at some time in the future. Owner, on behalf of itself, its successors and assigns, hereby acknowledges that its Property and the improvements to be constructed thereon will benefit from the construction of Liefer Road and therefore agrees and offers to participate in, and waives all rights to object to the formation of an assessment district, community facilities district, a bridge and thoroughfare fee district, or similar fair and appropriate financing mechanism for the possible construction of Liefer Road. The City Council, on behalf of such a district or other financing mechanism, shall at some future time also determine and assess the appropriate assessments or contributions of the participants in the district or other financing mechanism to Liefer Road contingent on it being in the district. The appropriate assessments and contributions shall be determined in accordance with such laws as are applicable to the mechanism chosen to fund the Project and all other applicable laws.

Section 3. GENERAL MATTERS

A. Integration This Agreement contains the entire understanding between the parties relating to the subject matter of this Agreement, all prior or contemporaneous agreements, understandings, representations and statements, oral or written, concerning the subject matter of this Agreement are merged into this Agreement and shall be of no further force or effect.

B. Investigation. Each party is entering into this Agreement based solely upon the representations set forth herein and upon each party's own independent investigation of any and all facts and legal research such party deems material. Each party warrants and represents to the other that it has had the opportunity to review this Agreement with legal counsel and financial consultants and to receive the advice of legal counsel, tax counsel and financial consultants prior to its approval and execution of the Agreement.

C. Timing. This Agreement shall be fully executed by all parties prior to and as a condition of issuance of a grading permit. Time is of the essence of each provision of this Agreement of which time of performance is a factor.

D. Waiver. Waiver by any party hereto of any term, condition, or covenant of this Agreement shall not constitute the waiver of any other term, condition, or covenant hereof.

E. Binding Effect. Of the covenants which have been established pursuant to this Agreement, the same shall be deemed to be covenants running with the land for the benefit of the City in carrying out its statutory responsibilities under California law and to enforce the provision of the Temecula General Plan and the Temecula Municipal Code. The covenants contained in this Agreement shall be binding for the benefit of the City and its successors and assigns, and such covenants shall run in favor of the City for the entire period during which such covenants shall be in force and effect, without regard to whether the City is or remains an owner of any land or interest therein to which such covenants relate. This Agreement shall be binding upon the heirs, executors, administrators, successors and assigns of the parties hereto. This Agreement shall be recorded in the office of the County Recorder for the County of Riverside.

F. Attorney's Fees. If litigation is reasonably required to enforce or interpret the provisions of this Agreement, the prevailing party in such litigation shall be entitled to an award of reasonable attorney's fees, in addition to any other relief to which it may be entitled.

G. Notices. Any notices or other correspondence between the parties shall be sent to the following unless either party gives the other notice of a change of address:

CITY OF TEMECULA
_____, City Manager
P.O. Box 9033
41000 Main Street
Temecula, California 92589-9033

OWNER

Notice shall be effective upon personal delivery, delivery by courier service or three business days following deposit in the United States Mail, postage prepaid, certified.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed the day and year first above written.

CITY OF TEMECULA

City Manager

ATTEST:

Susan W. Jones, MMC
City Clerk

APPROVED AS TO FORM:

Peter M. Thorson
City Attorney

OWNER

By _____

Title _____

ACKNOWLEDGMENT

State of California
County of Riverside

On _____, 20____, before me, _____,
personally appeared _____,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed
to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their
authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity
upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing
paragraph is true and correct.

Witness my hand and official seal.

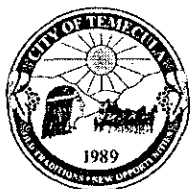
[Seal]

SIGNATURE OF NOTARY

APPENDIX B

“GRADING PERMIT APPLICATION”

B



PUBLIC WORKS DEPARTMENT

Land Development Division

41000 Main Street * Temecula, CA 92590

* www.cityoftemecula.org *

PERMIT NO.: _____ PA No.: _____

GRADING PERMIT APPLICATION

TYPE OF GRADING: ☐ MASS ☐ ROUGH ☐ PRECISE ☐ BORROW ☐ STOCKPILE

TYPE OF SUBMITTAL: ☐ CUSTOM HOME ☐ COMMERCIAL / INDUSTRIAL BLDG ☐ ADMINISTRATIVE

PROJECT INFORMATION

STREET ADDRESS (REQUIRED): _____

LEGAL DESCRIPTION: _____ APN No.: _____

(Tract / Parcel Map w/ Lot No.)

GROSS ACREAGE OF PROJECT: _____ DISTURBED ACREAGE OF AREA PROPOSED FOR GRADING: _____

EARTHWORK QUANTITY (C.Y.) AMOUNTS:

CUT	FILL	IMPORT	EXPORT	OVER-EXCAVATE

APPLICANT

COMPANY: _____ CONTACT: _____

MAILING ADDRESS: _____

PHONE: _____ FAX: _____ E-MAIL: _____

PROPERTY OWNER

NAME: _____ CONTACT: _____

MAILING ADDRESS: _____

PHONE: _____ FAX: _____ E-MAIL: _____

If more than one person is involved in the ownership of the property being developed, a separate page must be attached to this application, which lists the contact information of all persons having an interest in the ownership of the property.

CIVIL ENGINEER

COMPANY: _____ CONTACT: _____

MAILING ADDRESS: _____

PHONE: _____ FAX: _____ E-MAIL: _____

AUTHORITY FOR THIS APPLICATION IS HEREBY GIVEN:

SIGNATURE OF PROPERTY OWNER(S): _____

(Print Name)

(Print Name)

(Written Authorization May Be Attached)

DATE APPLIED

APPENDIX C "LAND DEVELOPMENT SUBMITTAL REQUIREMENTS"

C

(Refer to Public Works/Land Development for the latest version.)

LAND DEVELOPMENT SUBMITTAL REQUIREMENTS

PAGE 1 of 5



Legend:

COA - Conditions of Approval	PA - Planning Application	SFR - Single Family Residence
ESC - Erosion & Sediment Control Plan	PGP - Precise Grading Plan	TCP - Traffic Control Plan
LS - Licensed Surveyor	RCE - Registered Civil Engineer	WQMP - Water Quality Management Plan

Websites:

- For a current Fee Schedule, the On-Site and Off-Site Construction Security Worksheets, the grading permit application and this form, refer to the City's website under "Useful Documents" at:
<http://www.cityoftemecula.org/Temecula/Government/CommDev/Land+Development/grading.htm>
- For current haul route and encroachment permit applications, refer to the City's website under "Useful Documents" at:
<http://www.cityoftemecula.org/Temecula/Government/CommDev/Land+Development/Encroachments.htm>

A. GRADING

1. PERMIT ISSUANCE

a. PERMIT ISSUANCE REQUIREMENTS

- ☐ All applicable clearances
- ☐ Payment of all fees (per the current fee schedule)
- ☐ Any required report(s), if applicable
- ☐ Two (2) sets of approved plans and a CD of the plans (in .tiff format)

2. SUBMITTALS FOR TYPES OF GRADING PLANS

a. MASS/ROUGH GRADING PLAN

Notes: 1. *PA must be approved prior to acceptance of submittal; provide PA #.*

2. *For Rough Grading Plans, submit all other required submittals such as final map, street, storm drain, etc. per the approved COA.*

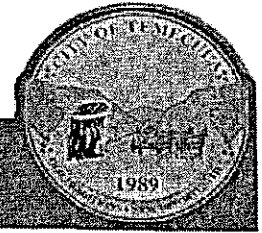
- ☐ Transmittal cover letter (with complete contact info) and a completed Grading Permit Application
- ☐ Five (5) sets of Grading Plan with an ESC Plan (prepared by a Registered Civil Engineer (RCE))
- ☐ One (1) copy of Soils Report (prepared by a Soils/Geotechnical Engineer)
- ☐ One (1) copy of a Hydrology Study
- ☐ Completed On-Site Construction Security Worksheet (prepared by a RCE)
- ☐ One (1) copy of the conceptually accepted WQMP document
- ☐ Gross Property Boundary Exhibit with Closure Calculations (calculated by a RCE or Licensed Surveyor (LS)); acreage should include right-of-way fronting property
- ☐ Full plan check fee (see current fee schedule)

b. COMMERCIAL/INDUSTRIAL PGP

- ☐ Same as the MASS/ROUGH GRADING PLAN requirements above in 2.a. (including *notes*) plus
- ☐ Copy of current Preliminary Title Report (not over 30 days old)
- ☐ Six (6) sets of Grading Plan with an ESC Plan (prepared by a RCE), instead of five (5).

LAND DEVELOPMENT SUBMITTAL REQUIREMENTS

PAGE 2 of 5



c. TRACT MODEL HOME COMPLEX/TEMPORARY SALES TRAILER PGP

Note: PA must be approved prior to acceptance of submittal; provide PA #.

- ☐ Transmittal cover letter (with complete contact info)
- ☐ Six (6) sets of Grading Plan (prepared by a RCE)
- ☐ Completed On-Site Construction Security Worksheet (prepared by a RCE)
- ☐ Full plan check fee (see current fee schedule)

d. TRACT PGP

Notes: 1. Home Product Review PA must be approved prior to acceptance of submittal; provide PA #;
2. Final Tract/Parcel Map must be submitted prior to acceptance of submittal.

- ☐ Transmittal cover letter (with complete contact info)
- ☐ Four (4) sets of Grading Plan with an ESC Plan, as required (prepared by a RCE)
- ☐ Completed On-Site Construction Security Worksheet, as needed (prepared by a RCE)
- ☐ One (1) copy of a conceptually accepted WQMP document
- ☐ Full plan check fee (see current fee schedule)

e. CUSTOM SINGLE FAMILY RESIDENCE (SFR) GRADING PLAN

Note: Septic system must be approved by County Envir. Health Dept. prior to acceptance of submittal.

- ☐ Transmittal cover letter (with complete contact info) and a completed Grading Permit Application
- ☐ Six (6) sets of Grading Plan with an ESC Plan (prepared by a RCE)
- ☐ One (1) copy of Soils Reports (prepared by a Soils/Geotechnical Engineer)
- ☐ One (1) copy of Hydrology Study (as required)
- ☐ Completed On-Site Construction Security Worksheet (prepared by a RCE)
- ☐ One (1) copy of a conceptually accepted WQMP document, as required
- ☐ Approval of septic system by County Environmental Health Department, as applicable
- ☐ Copy of current Preliminary Title Report (not over 30 days old)
- ☐ Gross Property Boundary Exhibit with Closure Calculations (calculated by a RCE or LS); acreage should include right-of-way fronting property
- ☐ Full plan check fee (see current fee schedule)

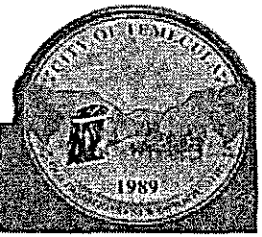
f. BORROW SITE/STOCKPILE GRADING PLAN

Note: PA must be approved prior to acceptance of submittal; provide PA #.

- ☐ Transmittal cover letter (with complete contact info) and a completed Grading Permit Application
- ☐ Completed Haul Route Permit Application
- ☐ Six (6) sets of Borrow Site Plan with an ESC Plan (prepared by a RCE)
- ☐ Completed On-Site Construction Security Worksheet (prepared by a RCE)
- ☐ Copy of current Preliminary Title Report (not over 30 days old)
- ☐ Full plan check fee (see current fee schedule)

g. ADMINISTRATIVE CLEARING

- ☐ Transmittal cover letter (with complete contact info) and a completed Grading Permit Application
- ☐ Two (2) sets of Plan with an ESC Plan (prepared by a RCE)
- ☐ Full plan check fee (see current fee schedule)



3. SUBMITTALS FOR TYPES OF GRADING PLAN REVISIONS

a. MASS/ROUGH GRADING PLAN REVISION

- ☐ Transmittal cover letter (with complete contact information)
- ☐ Five (5) sets of revised Grading Plan with an updated ESC Plan, as required (prepared by a RCE)
- ☐ Updated Soils Report, if applicable
- ☐ Completed On-Site Construction Security Worksheet, as required
- ☐ Full plan check fee (see current fee schedule)

b. COMMERCIAL/INDUSTRIAL PGP REVISION

- ☐ Same as the MASS/ROUGH GRADING PLAN REVISION requirements above in 3.a. plus
- ☐ Six (6) sets of revised Grading Plan (prepared by a RCE) instead of five (5)

c. TRACT PGP REVISION

- ☐ Transmittal cover letter (with complete contact info)
- ☐ Four (4) sets of revised Grading Plan (prepared by a RCE)
- ☐ Full plan check fee (see current fee schedule)

d. CUSTOM SFR GRADING PLAN REVISION

- ☐ Same as the COMMERCIAL/INDUSTRIAL PGP REVISION requirements above in 3.b.

e. BORROW SITE/STOCKPILE GRADING PLAN REVISION

- ☐ Transmittal cover letter (with complete contact info)
- ☐ Six (6) sets of revised Grading Plans (prepared by a RCE)
- ☐ Updated Soils Report, if applicable
- ☐ Full plan check fee (see current fee schedule)

B. HAUL ROUTE

1. PERMIT ISSUANCE

a. PERMIT ISSUANCE REQUIREMENTS

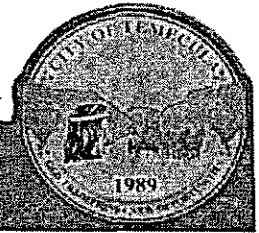
- ☐ Transmittal cover letter, completed application and permit fee
- ☐ Two (2) sets of the Haul Route plan
- ☐ Traffic Control Plans (TCP), if required. TCP, at a minimum, shall include: origin/destination of the haul route, frequency/no. of trucks involved, location/no. of certified flaggers, if required, etc.
- ☐ Schedule of work and quantity of material hauled

C. ENCROACHMENT

1. PERMIT ISSUANCE

a. PERMIT ISSUANCE REQUIREMENTS

- ☐ All applicable clearances and a completed Encroachment Permit Application
- ☐ Balance of all permit issuance, plan check and inspection fees
- ☐ Approved Traffic Control submittal, as required
- ☐ Liability insurance requirement; and Proof of City business license and contractor's license
- ☐ Two (2) sets of approved plans and a CD of the plans (in .tiff format)



2. SUBMITTALS FOR TYPES OF CONSTRUCTION PLANS

a. STREET IMPROVEMENT PLANS

- ☐ Transmittal cover letter (with complete contact info)
- ☐ Six (6) sets of Improvement Plans (prepared by a RCE)
- ☐ One (1) copy of Hydrology/Hydraulics Study (if storm drain included)
- ☐ Completed Off-Site Construction Security Worksheet (prepared by a RCE)
- ☐ One (1) copy of a conceptually accepted WQMP document, as required
- ☐ All applicable Traffic Plans and Traffic Control Submittals, as required
- ☐ Full plan check fee (see current fee schedule)

b. STORM DRAIN IMPROVEMENT PLANS

- ☐ Same as the STREET IMPROVEMENT PLANS requirements above in 2.a., but only
- ☐ Two (2) set of Improvement Plans (prepared by a RCE), instead of six (6)

c. SEWER & WATER IMPROVEMENT PLANS

Note: Separate submittals are required for the Fire Department, Eastern Municipal Water District and Rancho California Water District prior to acceptance of submittal.

- ☐ Transmittal cover letter (with complete contact info)
- ☐ Two (2) sets of Utility Plans (prepared by a RCE)
- ☐ Traffic Control Submittal, as required

d. TRAFFIC CONTROL

- ☐ Transmittal cover letter (with complete contact info)
- ☐ Two (2) sets of plans (prepared by a RCE)
- ☐ Full plan check fee (see current fee schedule)

e. SIGNING & STRIPING PLANS

- ☐ Same as TRAFFIC CONTROL requirements above in 2.d. plus a
- ☐ Completed Off-Site Construction Security Worksheet (prepared by a RCE)

f. TRAFFIC SIGNAL IMPROVEMENTS

- ☐ Transmittal cover letter (with complete contact info)
- ☐ Two (2) sets of plans (prepared by a RCE)
- ☐ Completed Off-Site Construction Security Worksheet (prepared by a RCE)
- ☐ One (1) copy of Special Provisions (specifications)
- ☐ Full plan check fee (see current fee schedule)

3. SUBMITTALS FOR TYPES OF CONSTRUCTION PLAN REVISIONS

a. STREET/STORM DRAIN IMPROVEMENT PLAN REVISION

- ☐ Transmittal cover letter (with complete contact info)
- ☐ Six (6) sets of revised Improvement Plans (prepared by a RCE)
- ☐ Completed Off-Site Construction Security Worksheet, as required
- ☐ Full plan check fee (see current fee schedule)



D. MAPS

1. TRACT/PARCEL MAPS

a. SUBMITTAL REQUIREMENTS

Note: PA for the Tentative Map must be approved prior to acceptance of submittal.

- ☐ Transmittal cover letter (with complete contact info)
- ☐ Six (6) sets of Maps with Environmental Constraint Sheet (prepared by a LS)
- ☐ One (1) copy of Traverse Calculations
- ☐ One (1) copy of current Preliminary Title Report with all supporting documents (not over 30 days old)
- ☐ One (1) copy of **approved** COA and **approved** Tentative Map
- ☐ One (1) copy of record of Statement of Partnership (if partnership is to execute the map)
- ☐ One (1) copy of **all** reference maps & materials used to prepare map
- ☐ Full plan check fee (see current fee schedule)

E. LEGAL DOCUMENTS

1. LEGAL DOCUMENT SUBMITTALS

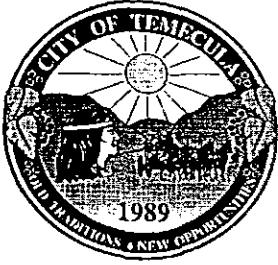
a. SUBMITTAL REQUIREMENTS

- ☐ Transmittal cover letter (with complete contact info)
- ☐ Two (2) copies of Legal Description with plat (prepared by a LS)
- ☐ One (1) copy of Traverse Calculations
- ☐ One (1) copy of current Preliminary Title Report with all supporting documents (not over 30 days old)
- ☐ Full plan check fee (see current fee schedule)

APPENDIX D "GRADING NOTES"

D

(Refer to Public Works/Land Development for the latest version.)



DEPARTMENT OF PUBLIC WORKS LAND DEVELOPMENT DIVISION

GRADING NOTES

These "Grading Notes" are intended to be used on all plans for private development that includes work related to: mass, rough and precise grading, borrow site/stockpiling, erosion and sediment control, administrative clearing, subject to review and approval by the Department of Public Works.

1. Standards. All construction and grading related activities (i.e., stockpiling, land clearing, erosion & sediment control, etc.) shall be performed in accordance with Chapter 18 of the City of Temecula Municipal Code, the Engineering and Construction Manual, all applicable standards, the latest edition of the California Building Code (Appendix J) and, if applicable, the State Water Resources Control Board (SWRCB) National Pollution Discharge Elimination System (NPDES) General Permit for Construction Activities.
2. Permit Requirements. A grading permit shall be obtained prior to commencement of any work on the site.
3. Notifications. Public Works shall be notified via the Public Works Inspection Line at (951) 308-6395 at least 24 hours in advance of beginning any construction/grading operations.
4. Soils. All construction/grading activities shall be done in conformance with recommendations of the preliminary soils investigation by _____ dated _____. Said report shall be considered a part of this grading plan.
5. Cut/Fill.
 - a. Maximum cut and fill slopes shall be 2:1, unless otherwise approved by the City Engineer; and shall comply with the recommendations of the soils report. Fill slopes shall not have less than 90% relative compaction out to the finish surface.
 - b. Fill material shall not be placed on existing ground until the ground has been cleared of weeds, debris, topsoil, vegetation and other deleterious material. If the slope ratio exceeds 5:1 and is greater than five feet, the terrain must be keyed and benched into either bedrock or native soil, as directed by the geotechnical engineer.
 - c. Stability calculations with a factor-of-safety of at least one and five tenths (1.5) shall be submitted to Public Works by a registered civil engineer, soils engineer or geologist for cut and fill slopes over 30 feet in vertical height.
 - d. All grading shall be done under the supervision of a registered civil engineer, soils engineer or geologist, who shall submit two sets of written certification that all fills over one foot in depth have been properly placed.
6. Drainage.
 - a. As applicable, provide concrete brow ditches to convey 100-year storm flows or provide graded berms along the top of all graded slopes over three feet in vertical height or that are

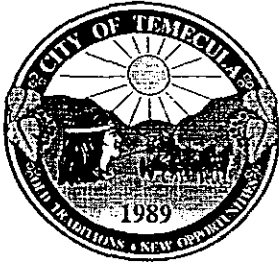
adjacent to graded areas, to direct surface runoff away from the top of slopes. All drainage devices shall be constructed per the approved plans.

- b. Existing drainage courses shall continue to function at all times. No obstruction of flood plains or natural water courses shall be permitted.
 - c. Temporary drainage shall be provided until permanent drainage structures are installed. Protective measures shall be implemented to protect adjoining and downstream properties from silt deposition and ponding water during construction/grading operations.
 - d. Approved protective measures and temporary drainage provisions must be used to protect adjoining properties during the grading project.
 - e. Drainage easements shall be kept clear of all obstructions; no building or walls shall be placed within the limits of easements.
 - f. The minimum grade for concrete surface drainage facilities shall be a one-half percent (0.5%).
7. Property Corners. All property corners shall be clearly delineated in the field prior to commencement of any construction/grading activity, as directed by the City Engineer.
 8. Rough Grading Inspections Prior to Building Permit. Inspections shall be requested via the Public Works Inspection Line at (951) 308-6395. Submit the following:
 - a. two sets of pad elevation certification (i.e., rough grade) to include a statement that the pad elevation complies with the approved grading plan. Certification shall be to line, grade, elevation and location of cut/fill slopes.
 - b. two sets of pad compaction certification (i.e., final geotechnical/soils report) to include a statement that the grading complies with recommendations of the preliminary soils report.
 9. Final Inspection Prior to Occupancy. Refer to the City's Engineering and Construction Manual.
 10. Post Grading Activities. Post grading activities shall include, but not be limited to, installing where applicable: groundcover, trees, shrubs or a combination thereof in accordance with the Temecula Municipal Code prior to final inspection. Slopes over four feet in vertical height shall have permanent irrigation systems with backflow prevention devices per the U.P.C.
 11. Other Construction Notes. Refer to separate notes for "paving," "general" and "erosion and sediment control" requirements.

APPENDIX E "GENERAL NOTES"

E

(Refer to Public Works/Land Development for the latest version.)



DEPARTMENT OF PUBLIC WORKS LAND DEVELOPMENT DIVISION

GENERAL NOTES

These "General Notes" are intended to be used on all plans for private development, reviewed and approved by the Department of Public Works.

1. Standards. All work shall conform to the requirements of the current edition of the City's Improvement Standard Drawings for Public Works Construction (and subsequent amendments), the City's Engineering and Construction Manual, City codes and requirements.
2. Emergency Telephone Numbers. (Answering machine is not acceptable):

(Responsible Person/Developer)	(Company)	(24-hr Phone Number)
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(Responsible Person/Contractor)	(Company)	(24-hr Phone Number)
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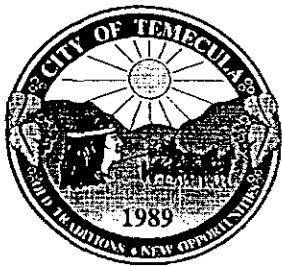
3. License/Permit Requirement.
 - a. Prior to start of any work, a business license shall be obtained from the City.
 - b. A Grading Permit shall be obtained, prior to any work on private development. The permit and an approved set of improvement plans must be present at the jobsite during construction.
4. Errors or Omissions. Approval of these plans by the City does not relieve the applicant and engineer of record from the responsibility for the correction of errors or omissions discovered during construction.
5. Working Hours. City Ordinance No. 94-25 states that no person shall engage in or conduct construction activity, when the construction site is within one-quarter of a mile of an occupied residence, between the hours of 6:30 pm and 6:30 am, Monday through Friday and shall only engage in or conduct construction activity between the hours of 7:00 am and 6:30 pm on Saturday. No construction activity shall be undertaken on Sunday and nationally recognized holidays.
6. Regulatory Agency Clearances. The issuance of a permit by the City does not imply or provide any clearances from state or federal agencies regulating the provisions of state or federal endangered species acts or water quality regulations. The appropriate clearances from these agencies shall be obtained prior to any site disturbance or grading.
7. Construction Change. Any construction change must be first submitted to the City as a redline revision for review and approval prior to implementing the change in the field. Refer to the City's Engineering and Construction Manual.
8. Pre-Construction Meeting. A pre-construction meeting shall be scheduled two work days prior to the start of construction. During construction, a dependable and responsive contractor's representative shall be at the job site at all times.

9. Utilities. Approval of these plans by the City does not constitute a representation as to the accuracy or completeness of the location, nor the existence or non-existence of any underground utilities within the project limits. Any utility damaged during the performance of the work shall be repaired or replaced to the satisfaction of the governing agency by the contractor, at his expense.
10. Survey. It shall be the responsibility of the contractor to notify the engineer of record and to install street centerline monuments, as required by Riverside County Ordinance No. 491. Centerline ties shall be provided to the City Engineer, upon completion of the project and before acceptance is granted. All existing monumentation (disturbed or destroyed during construction) shall be replaced to City standards in accordance with the Land Surveyors Act and the Streets and Highway Code, and as approved by the City Engineer. Upon request, survey cuts sheets shall be provided to the City Engineer.
11. Dust Control. Dust shall be controlled by watering or other methods, as approved by the City Engineer and shall comply with South Coast Air Quality Management District's (SCAQMD) Rule 403.
12. Construction Fencing. A six foot chain link fence is required on all industrial and commercial projects until roof systems are completed or as deemed necessary by the City Engineer for public safety. The maintenance of the fence is the sole responsibility of the contractor.
13. Inspections. All work performed without proper inspection from the City may be subject to rejection.
14. Other Construction Notes. Refer to separate notes for "grading," "erosion and sediment control," "paving" and "traffic" requirements, if applicable.

APPENDIX F "EROSION & SEDIMENT CONTROL NOTES"

F

(Refer to Public Works/Land Development for the latest version.)



DEPARTMENT OF PUBLIC WORKS LAND DEVELOPMENT DIVISION

EROSION & SEDIMENT CONTROL NOTES

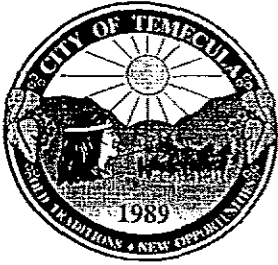
These "Erosion & Sediment Control Notes" are intended to be used on all Public Works plans for both private development and public right-of-way improvements. The notes are comprehensive and should be applied according to site-specific conditions.

1. Filtered Runoff. All runoff shall be filtered prior to discharging from a site or to any type of private or public storm water conveyance system (natural watercourses, streets, gutters, concrete-lined v-ditches, storm drains, flow-lines, inlets, outlets, etc.). All non-permitted discharges are prohibited from entering any storm water conveyance system year-round.
2. Best Management Practices (BMP's). **Year-round**, pollution prevention measures, also known as Best Management Practices (BMP's), must be installed prior to any field activities. BMP handbooks can be downloaded at www.cabmphandbooks.com. Additional erosion prevention and sediment control (ESC) measures must be installed and maintained prior to and throughout each rainy season. The developer/contractor is responsible for ESC measures throughout the duration of the project for all clearing, disking, grading, excavating and stockpiling activities, and on all exposed slopes and inactive pads throughout the entire site. The developer/contractor is also responsible for any discharges from subcontractors.
 - a. Stockpiling of BMPs. Additional ESC materials shall be stockpiled at various locations throughout the site for immediate use within seven days prior to any forecast rain. On emergency situations, the developer/contractor shall immediately make equipment and workers available to protect the site.
3. Erosion and Sediment Controls. All ESC measures shall be inspected, restored, repaired or modified year-round throughout the site to protect perimeters, adjacent properties, environmentally sensitive areas and all private/public storm water conveyance systems. If any erosion or sediment controls fail during any rain event, more effective ones will be required in their place.
 - a. Erosion Controls. Erosion controls shall include, but are not limited to applying and establishing: vegetative cover, wood mulch, stapled or pinned blankets (straw, coconut or other), plastic sheeting (minimum 10-mil), polypropylene mats, spray-on controls to all disturbed areas or other measures approved by the City Engineer. Jute netting shall not be used as a stand-alone erosion control. For slopes greater than 4:1, provide fiber rolls and either a bonded fiber matrix product applied to a rate of 3500 lb/acre or a stabilized fiber matrix product applied to a rate of 10 gal/acre. The City Engineer may approve different application rates for slopes less than 4:1.
 - b. Sediment Controls. Sediment controls shall include, but are not limited to: desilting basins, graded berms, fiber rolls, silt fences, gravel bag chevrons (filled with minimum ¾" gravel), check dams, drainage inlet protection, etc. Fiber rolls shall be installed in 15-foot increments measured along the face of the slope. Silt fence shall be installed along interior streets and combined with gravel-bag or silt fence chevrons inside the sidewalk right-of-way or back of curbs.

4. State Construction General Permit. If the project disturbs, exposes or stockpiles one acre or more of soil, the site must be covered under the State Construction General Permit. A Waste Discharge Identification (WDID) Number, a risk level determination number and the Qualified "Storm Water Pollution Prevention Plan" (SWPPP) Developer (QSD) shall be provided to the City prior to issuance of a grading permit. A SWPPP shall be implemented throughout the duration of the project and shall be readily available to City and State inspectors and updated to reflect current site conditions during construction. The construction permit can be downloaded at: www.waterboards.ca.gov/water_issues/programs/stormwater/construction.
5. Perimeter Protection. Perimeter protection must be installed prior to any clearing activities. Clearing shall be limited to areas that will be immediately graded or disturbed. A combination of ESC measures shall be implemented in areas that have been cleared. All disturbed areas of an inactive site, as described in the Engineering and Construction Manual, shall also be protected.
6. Construction Access Points. Construction access points shall be stabilized with a combination of rock and shaker plates year-round to prevent track-out. Interior access points (all proposed driveways, material storage and staging area entrances/exits, etc.) shall also be protected with rock to prevent track-out onto interior streets. Routine street sweeping shall be performed on all paved streets where tracking is observed. Vacuum sweepers shall be used when street sweeping becomes ineffective. Controlled street washing shall only be allowed prior to the application of asphalt seal coats, and only when all pertinent drainage inlets are protected.
7. Desilting Basins. Desilting basins shall be designed according to the guidance provided in CASQA's construction BMP handbook. Impounded water shall be secured from the public. Signage indicating "Ponded Water - Do Not Enter," or an equivalent warning notice, shall be posted.
8. Material Storage. Material storage and staging areas shall be established. Fuel tanks, portable toilets, liquids, gels, powders, landscape materials and stockpiles of soil shall be stored away from all private/public storm water conveyance systems, sidewalks, right-of-ways and flow-lines and shall have secondary containment. Inactive stockpiles of soil shall be covered at all times. Active stockpiles shall be covered prior to a forecast rain.
9. Construction Waste. Construction waste and miscellaneous debris shall be placed in water-tight bins. Wire mesh receptacles shall not be allowed. Wash-out stations shall be provided for concrete, paints, stucco and other liquid waste, and shall be lined with plastic and located away from public right-of-ways, flow lines, etc. Prior to any forecast rain, bins and wash-outs shall be covered with lids or plastic tarps.
10. Slope Protection. Storm water runoff shall not be directed over slopes without permanent down drains installed. ESC measures are required on all exposed slopes until sufficient/permanent landscape is established. There shall be 100% slope protection in place prior to issuance of certificate of occupancy.
11. Portable Mixers. All portable mixers shall have plastic liners underneath them with gravel-bags placed on the down-hill side of the liners to contain discharges.
12. Maintenance. All onsite and offsite flow lines (i.e., v- and brow-ditches, terrace drains, ribbon gutters, curb gutters, etc.), storm water conveyance systems, check dams, chevrons, silt fences and desilting basins shall be free of sediment, construction materials, waste, miscellaneous debris and deteriorated ESC measures *year-round*.
13. Obstructions. No obstructions, other than BMP's, shall be allowed within any storm water conveyance system, unless alternative drainage facilities have been approved by the City Engineer.
14. Other Construction Notes. Refer to separate notes for "general," "grading" and "paving" requirements.

APPENDIX G "PAVING NOTES"

G



DEPARTMENT OF PUBLIC WORKS LAND DEVELOPMENT DIVISION

PAVING NOTES

These "Paving Notes" are intended to be used on all plans for private development and public right-of-way improvements subject to, but not limited to: precise grading/paving improvements (i.e., private/public parking lots, driveways, private/public streets, etc.), street improvements, storm drain improvements and trench repairs.

1. Standards. All work and materials (i.e., asphalt concrete (AC) pavement, Portland Concrete Cement (PCC), base course, etc.) shall conform to the Standard Specifications for Public Works Construction (i.e., GreenBook) latest edition, the Engineering and Construction Manual, City and engineering standards and requirements.
2. Permit Requirements. A grading or encroachment permit(s) shall be obtained prior to paving. Before obtaining an encroachment permit, a Certificate of Insurance and the required bonding (for public improvements) shall be provided to the City Engineer. A Caltrans encroachment permit may be required.
3. Soil Sterilizer. An approved soil sterilizer shall be used on all base grade surfaces prior to paving.
4. Prime Coat. Prime coat is required on subgrade or base when the base is subjected to substantial construction traffic (or when long time periods elapse before AC is placed), as determined by the soils engineer and approved by the City Engineer.
5. Type I Slurry. Prior to project final completion and acceptance of streets into the City's maintained system, Type I Slurry shall be placed over the asphalt concrete paved project street(s), as directed by the City Engineer. The entire roadway width shall be swept at least 3 times or as directed by the City Engineer.
6. Fog Seal. For private development, asphaltic emulsion (fog seal) shall be applied not less than 14 days following placement of the asphalt surfacing and shall be applied at a rate of 0.05 gallons per sq. yd. The asphalt emulsion shall conform to Sections 37, 39 and 94 of the State Standard Specifications.
7. Tack Coat. A tack coat shall be applied to existing pavement and vertical joints, concrete surfaces and asphalt concrete base course, if it has been exposed to vehicular loads. The tack coat shall be slow setting anionic emulsified asphalt Type "SS-1h" conforming to the GreenBook.
8. Certification/Testing. All subgrade and base grade shall be certified by a licensed land surveyor. Base and AC materials shall be tested in accordance with the City's Quality Assurance Program (QAP) and/or as directed by the City Engineer.

9. Paving Materials.

a. AC Materials.

1. AC materials shall conform to section 203-6 of the GreenBook and City Standards.
 - i. Type C2 PG70-10 for finish and overlay courses. This course shall be a minimum of 0.12 foot (1½ inches) thick including grind and overlay installations.
 - ii. Type B PG70-10 for base course. This course shall contain the balance of the required asphalt concrete thickness. The minimum AC lift for base course is 0.21 foot (2½ inches).
2. The minimum AC thickness is 0.33 foot (4 inches).
3. The maximum AC lift is 0.33 foot (4 inches).

Note: "Shoving" is a type of AC pavement failure that may be caused by asphalt mixes that are too rich in asphalt, that have coarse/fine aggregate that is too rounded, etc. Typically, shoving results at hills, curves or intersections, caused by braking or accelerating vehicular forces. To prevent or minimize shoving, the City reserves the right to require a modified AC mix design with properties that provide high stability (i.e., ability to resist shoving and rutting, angular aggregate particles with a rough surface texture, etc.) in compliance with the GreenBook and/or Caltrans specifications.

b. Base Materials.

1. Base materials shall conform to provisions of the GreenBook and current City standards.
2. For street sections, base course material shall be Crushed Aggregate Base (CAB) or Crushed Miscellaneous Base (CMB) per sections 200-2.2 and 202-2.4 of the GreenBook. Principal and Urban Arterial roads require CAB.

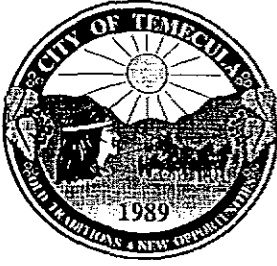
c. Portland Concrete Cement. All PCC used shall be in conformance to the GreenBook.

10. Mix Designs. Ten working days prior to paving, the proposed mix design(s) from the supplying asphalt or concrete plant shall be submitted to the City for review and approval. The mix design(s) shall clearly show that the design meets all City and GreenBook requirements.
11. Street Sections. Street structural sections shown on plans are tentative (i.e., they're used for bonding purposes). The final structural section requirements shall be determined by additional soil tests, after rough grading. The structural section design shall be reviewed and approved by the City Engineer. Said design shall adhere to the methodology set forth in Chapter 600 of Caltrans Highway Design Manual and shall utilize the "R" value method (i.e., "R" value tests shall be conducted in accordance with California Test No. 301 and shall be certified by a registered civil engineer). The number and locations of these tests shall be subject to approval by the City Engineer.
12. Compaction. Prior to placement of base material and AC, compaction reports by a soils engineer, certifying 95% compaction of sub-grade and base material, shall be submitted to the City Engineer. Compaction test observation of sub-grade and base grade materials shall be coordinated to include the soils engineer and the Public Works inspector.
13. Paving Inspections.
 - a. Base Grade Inspection. One inspection at sub-grade completion (prior to placement of base) is required by the Department of Public Works.
 - b. Paving Inspections. Two paving inspections are required by the Department of Public Works: (1) prior to paving, at base grade completion; and (2) during placement of AC.

- c. Driveways. All onsite private residential driveways shall comply with the approved plans and City standards, and shall be inspected and cleared by the City Engineer prior to paving.
14. Utilities. All underground facilities and laterals shall be in place prior to paving.
15. Trenching for Utilities. All street trenches shall conform to City and engineering standards. Refer to City Standard No. 407 "Trench/Pothole Repair" for trench maintenance and/or repairs. If trenches in close proximity and parallel to gutter lines result in leaving pavement strips in distress or less than two feet in width (between the trench and gutter line), said pavement strips shall be removed and repaved, at the discretion of the City Engineer. A tack coat shall be applied to join existing asphalt concrete and vertical surfaces in compliance with the GreenBook.
16. Parking Lot Grade. The minimum AC or concrete pavement grade shall be one percent (1%).
17. Gutter Lip. A 3/8 inch lip shall be placed adjacent to concrete gutters in accordance with City and engineering standards. Refer to Standard No. 200.
18. Paving Detail around Manholes, Valve Covers, etc. All paving around manholes, utility valve covers, etc. shall be in accordance with the GreenBook requirements, utility agency requirements, City and engineering standards. Refer to City Standard No. 503 "Paving Detail Around Manhole."
19. AC Placement. The method of depositing, distributing (i.e., using a self-propelled spreading/finishing machine) and rolling AC shall be in accordance with the GreenBook.
20. Acceptance of Product. The contractor shall repair any defective surfacing due to grade settlement of fills, trench fills or base material, as required by the City Engineer. No pavement "birdbaths" or deviations greater than 1/8 inch in six feet shall be accepted.
21. Protection of Work. The contractor shall: (a) protect existing structures, curb and gutters, sidewalks, landscaping, catch basin depressions and other surface features against damage caused by paving operations and asphalt spray; (b) protect completed work; all vehicular traffic (i.e., moving or stationary loads) shall be kept off newly paved areas until pavement surfaces have cooled down adequately; (c) clean the site (i.e., remove loose pavement and aggregate, clean out all manhole pits, ensure free operation of valves after paving, remove all debris, rubbish and excess material from work area, etc.).
22. Other Construction Notes. Refer to separate notes for "general," "grading," and "erosion and sediment control" requirements.

APPENDIX H "CONTENT OF A GRADING PLAN"

H



DEPARTMENT OF PUBLIC WORKS LAND DEVELOPMENT DIVISION

"CONTENT OF A GRADING PLAN"

A grading plan shall be submitted on a standard 24" x 36" (D size) bond copy for review and shall include the City's standard title block and applicable standard notes. The content of a grading plan shall generally include:

1. Title Sheet.
 - a. Contact information for the applicant, owner, civil engineer, soils engineer and, when required, the project paleontologist and/or archeologist.
 - b. Contact information for the 24-hour contact person responsible for the site.
 - c. Building & Safety Department's signature block for Title 24 compliance.
 - d. Soils Engineer Certification.
 - e. Legend, north arrow, bar scale, vicinity map.
 - f. Project address, Assessor Parcel Number (APN), legal description and benchmark.
 - g. Planning Application (PA) number and project name.
 - h. Earthwork quantities in cubic yards to be disturbed, excavated, over-excavated, filled, imported, exported, stored or, otherwise, utilized on subject property.
 - i. Gross acreage and proposed disturbed acreage of subject property.
 - j. Water Discharge Identification (WDID) number, if applicable.
 - k. Date and source of topography.
 - l. All standard construction notes.
 - m. A summary of itemized construction items (with quantities and units) that is used / shown on each sheet.
2. The engineering scale of the plan shall not exceed 1" = 40'.
3. The lettering size on the plan shall be a minimum of 0.10".
4. The plan shall be oriented so that the "North Arrow" is specified at the top right side of each page.
5. All existing and proposed items on the grading plan shall be drawn to scale and clearly defined with distance, spot elevations, gradients, contours, details, cross sections, flow arrows, etc.
6. Show existing and proposed topography of the subject property on-site and 50' beyond the subject property at a maximum contour interval of 2' so as to define the topography over the entire site. Ninety percent (90%) of the contours shall be plotted within one contour interval of the true location.
7. Show all property and Right-of-Way (R/W) lines and label with metes and bounds.
8. Show location and type of all easements on subject property.
9. Show location and label limits of Federal Emergency Management Agency (FEMA) flood plain; provide base flood elevations and reference the appropriate Flood Insurance Rate Map (FIRM).
10. Show location and label any special hazard zones (earthquake faults, liquefaction, watercourse etc.)
11. Show location and label all existing and proposed fire hydrants adjacent to subject property.
12. Show all existing and proposed retaining walls. Label all proposed retaining walls with the note "Retaining Wall by Separate Permit."

13. Delineate and label all slopes (2:1 maximum).
14. Show footprints of all existing structures.
15. Show pad elevations on all adjacent properties.
16. Show details (plan and section) of all surface and underground drainage devices, walls, cribbing, dams and other protective devices to be constructed with or as part of the proposed work, together with a map showing the drainage area and the calculated runoff of the area served by any drain and the calculated carrying capacity of such drains.
17. Show location and dimension of all proposed public improvements.
18. Show location and label all known existing utilities (water, sewer, etc.).
19. Show location and label all known existing and proposed natural and man-made drainage and flood control facilities.
20. Show location and label all existing trees that will be impacted by construction.
21. Show location and graphic representation of proposed excavations and fills (cut/fill lines and daylight lines).
22. Show location of existing vegetation types and the location and type of vegetation to be left undisturbed.
23. Show typical cross sections along each side of project boundary (property lines, slopes, streets, storm drain, utilities, etc.)
24. The ESC plan shall show the existing and proposed topography, location of final surface runoff treatment devices and the erosion and sediment control devices.
25. Any additional plans, drawings, calculations, environmental impact information or other reports required by the City.
26. In addition to the above, a Precise Grading Plan (PGP) also contains the following:

PGP for Commercial/Industrial, Tract Subdivision and Custom Single Residential Lot Developments:

- a. Show footprints of all proposed (and existing, if applicable) structures with pad and finished floor (and finished grade, if applicable) elevations.
- b. Show cross section details for building footings and side-yard swale relationship (including the extra height for footing).
- c. Delineate and label setback distances between structures and top/toe of slopes and property lines.
- d. Delineate and label all drainage flow lines per City Standards.
- e. Show all proposed concrete flat work, driveways, sidewalks, etc.

In addition to the above, a PGP for Tract Subdivision Developments shall include the following:

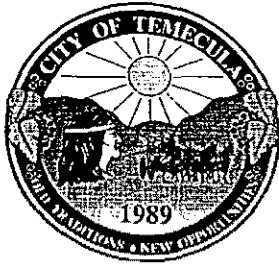
- f. Show all "ADA Disabled Access" requirements in accordance with Section 18.15.140 "Disabled Access" of the TMC.
- g. All proposed Fire Department vehicle access roads and/or turnarounds shall be in compliance with California Fire Code (CFC) Section 902.

In addition to the above, a PGP for Custom Single Residential Lots shall include the following:

- h. Show location and label septic tanks and leach fields, if applicable.
- i. Show typical details for benching and berms, if applicable. (Refer to Chapter 15 of this Manual.)
- j. Same as g above. (Fire Dept. vehicle access roads)

APPENDIX I "OFF-STREET PARKING REQUIREMENTS"





DEPARTMENT OF PUBLIC WORKS LAND DEVELOPMENT DIVISION OFF-STREET VEHICLE PARKING

The purpose of this section is to provide certain standards for off-street parking and loading spaces for multi-family, commercial and industrial sites and to assure provision of safe, adequate and well-designed off-street parking facilities. The standards for parking facilities are intended to reduce vehicular traffic hazards, promote vehicular and pedestrian safety and efficient land use. Off-street parking and loading areas shall be established in a manner which will promote compatibility between parking facilities and surrounding neighborhoods, protect property values and enhance the environment through good design by providing amenities such as landscaping, walls, fencing, setbacks, appearance, provide for water quality mitigation measures and the general well-being of the residents of the City of Temecula.

Development Standards for Off-Street Parking Facilities

The following standards shall apply to the development of all parking facilities:

1. Surfacing – All parking areas and driveways used for access thereto shall be surfaced with the following:
 - A. The standard for parking lots shall be the same as streets with respect to sub-grade, base rock, asphalt and concrete.
 - B. Note the minimum traffic indexes:
 1. TI = 5 in the parking stalls and drive lanes not accessible to trucks; and
 2. TI = 6 in truck lanes and truck accessible areas.
 - C. Concrete surfacing shall be minimum four inches thick and shall include expansion joints.
 - D. Asphaltic concrete shall be minimum four inches thick over minimum six inches of crushed aggregate base or Class II base. The structural section thickness may be varied based on the recommendations of the preliminary soils report.
2. Marking – The marking of paved parking areas shall be as follows:
 - A. Each space shall be clearly marked with white paint or other easily distinguishable material per the planning department.
 - B. Directional signs or arrows painted on the surface may be used to properly direct traffic.
3. Grading – All parking areas and driveways shall be graded to prevent ponding and to negate drainage runoff from entering adjoining property.
4. Lighting – Parking area lighting shall be such that it would preclude the direct glare of lights from shining directly onto adjoining property or streets. Outdoor lighting shall be energy efficient low-pressure sodium lamps oriented and shielded to prevent direct illumination above the horizontal plane passing through the luminaires.

5. Planter Walkway - A six inch high curb with a 12 inch wide concrete walkway shall be constructed along planters on end stalls adjacent to automobile parking areas.
6. Parking Space Location - No parking space shall be located within three feet (3') of any property lines.
7. Parking Stalls – The size of parking stalls shall be as follows:
 - A. Covered or uncovered off-street parking spaces shall be a minimum of nine feet in width and 18 feet in depth.
 - B. Parking spaces with a side abutting a wall, building, fence or other obstructions shall be two feet wider than standard required width.
 - C. Parallel parking spaces may be eight feet in width and 22 feet in depth with 30 feet in depth at end stalls.

**APPENDIX J "AGREEMENT FOR REVIEW UNDER EARTHQUAKE FAULT ZONING
ACT"**

J

AGREEMENT FOR REVIEW UNDER EARTHQUAKE FAULT ZONING ACT

This agreement is made and entered into this 13th day of November, 2001, between the County of Riverside (hereinafter COUNTY"), on behalf of its Transportation and Land Management Agency/Planning Division (TLMA), and the City of Temecula (hereinafter "CITY").

RECITALS

1. CITY has a need for review of site-specific geologic reports prepared and submitted pursuant to the Alquist-Priolo Earthquake Fault Zoning Act ("Act") regarding the incorporated areas of the CITY.
2. TLMA has a State Registered Geologist who has the expertise, and knowledge to perform the services needed by the CITY.
3. COUNTY and CITY desire to specify the terms and conditions under which the services shall be provided.

Section I

TLMA agrees:

1. Upon request from CITY, to provide the review and approval by a State Registered Geologist prior to permit approval by the CITY as required by the Act.
2. To perform the services to the same extent and in the same manner as it does similar review services for itself, in

accordance with the following procedure:

- a. The following items should be transmitted to TLMA:
 1. Four (4) wet signed copies of the site specific, geologic/fault hazard report.
 2. The assessor's parcel number(s) for the applicable lots.
 3. The CITY's case number and appropriate case maps.
 4. A check, payable to Riverside County Planning Department for the current review fee charges by the County for Alquist-Priolo report review. See County Ordinance 547 and 671. These fees are subject to a one and one half percent (1.5%) Land Management System Fee Surcharge. This surcharge is added to the total fees per the fee schedule.
A copy of the current fee schedule is attached.
- b. Upon receipt of the report and fees, the report is assigned a County Geologic Report Number. The report is reviewed and a site visit is made within 30 days of receipt of the transmittal package. COUNTY will work directly with the Registered Geologist who prepared the report, to obtain an acceptable report. Copies of review letters with comments will be sent to the CITY.
- c. Upon an acceptable report being obtained, a letter that includes the conclusions and recommendations of

the consultant's report, appropriate conditions of approval for the project, and a statement indicating approval of the report is prepared. Copies of the final, approved report and the letter will be transmitted to CITY and the California Division of Mines and Geology, in compliance with the Act.

3. To retain, consistent with State law, all documents submitted and documentation thereafter generated by COUNTY relating to the services performed hereunder.

Section II

CITY agrees:

1. To submit all necessary documentation for review to COUNTY.
2. To collect and forward to COUNTY with the documentation, the appropriate fee evidencing the cost of review.
3. That CITY shall indemnify and hold COUNTY, its officers, agents and employees free and harmless from any liability whatsoever based or asserted upon any claims arising out of the performance of this Agreement, for property damage, bodily injury or death or any other element of damage of any kind or nature, relating to or in anyway connected with the services contemplated by this agreement to the same extent as CITY is required to indemnify and hold its officers, agents and employees free and harmless. CITY shall defend, at its expense, including reasonable attorney

fees, COUNTY its officers, agents and employees in any claim asserted and in any legal action based upon such alleged acts or omissions.

Section III

It is mutually agreed as follows:

1. All arrangements for services hereunder shall be made between CITY Of Temecula and the TLMA Chief Engineering Geologist.
2. The parties shall meet at mutually agreeable times to review performance of services and resolve any problems that may develop.
3. The term of this agreement shall commence upon execution thereof by the parties and shall terminate (no date); provided, however, that either party hereto may terminate this agreement by giving 30 days written notice to the other party.
4. This Agreement shall not be delegated or assigned by CITY or COUNTY, either in whole or in part.
5. This Agreement constitutes the entire Agreement between the parties hereto with respect to the subject matter hereof and all prior or contemporaneous agreements of any kind or nature relating to the same shall be deemed to be merged herein. No alteration or variation of the terms of

this Agreement shall be valid unless made in writing and signed by the Parties hereto, and no oral understanding or agreement not incorporated herein, shall be binding on any of the parties hereto.

6. If any provision in this Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions will nevertheless continue in full force without being impaired or invalidated in any way.
7. Any notice required or authorized under this Agreement shall be in writing. If notice is given by United State mail, it shall be sent registered or certified mail, return receipt requested, addressed as follows:

City of _____

County of Riverside
TLMA/Director of Planning
4080 Lemon St., 9th Flr
Riverside, CA 92501

8. This agreement is intended by the parties hereto as a final expression of their understanding with respect to the subject matter hereof and as a complete and exclusive statement of the provisions thereof and supersedes any and all prior and contemporaneous agreements and understandings, oral or written, in

connection therewith. This agreement may be changed or modified only upon the written consent of the parties hereto.

Date: FEB 28 2002

County of Riverside

ATTEST: FEB 28 2002
Gerald A. Maloney
Clerk of the Board

By: Bob Buster
Chairperson, Board of
Supervisors
ROBERT A. BUSTER

By: [Signature]
Deputy

(SEAL)

Dated: 11/15/01

City of: Temecula

ATTEST:

[Signature]
City Clerk
Susan W. Jones, CMC

By: [Signature]
Mayor
Jeff Comerchero

APPROVED AS TO FORM:

[Signature]
Peter M. Thorson, City Attorney

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APPENDIX K "SEISMIC HAZARDS MAPPING ACT / REGULATIONS"

K

SEISMIC HAZARDS MAPPING ACT

PUBLIC RESOURCES CODE

DIVISION 2. Geology, Mines, and Mining

Chapter 7.8. Seismic Hazards Mapping

2690. This Chapter shall be known and may be cited as the Seismic Hazards Mapping Act.

2691. The Legislature finds and declares all of the following:

- a) The effects of strong ground shaking, liquefaction, landslides, or other ground failure account for approximately 95 percent of economic losses caused by an earthquake.
- b) Areas subject to these processes during an earthquake have not been identified or mapped statewide, despite the fact that scientific techniques are available to do so.
- c) It is necessary to identify and map seismic hazard zones in order for cities and counties to adequately prepare the safety element of their general plans and to encourage land use management policies and regulations to reduce and mitigate those hazards to protect public health and safety.

2692.

- a) It is the intent of the Legislature to provide for a statewide seismic hazard mapping and technical advisory program to assist cities and counties in fulfilling their responsibilities for protecting the public health and safety from the effects of strong ground shaking, liquefaction, landslides, or other ground failure and other seismic hazards caused by earthquakes.
- b) It is further the intent of the Legislature that maps and accompanying information provided pursuant to this chapter be made available to local governments for planning and development purposes.
- c) It is further the intent of the Legislature that the California Geological Survey, in implementing this chapter, shall to the extent possible, coordinate its activities with, and use existing information generated from , the earthquake fault zones mapping program pursuant to Chapter 7.5 (commencing with Section 2621), and the inundation maps prepared pursuant to Section 8589.5 of the Government Code.

2692.1. The State Geologist may include in maps compiled pursuant to this chapter information on the potential effects of tsunami and seiche when information becomes available from other sources and the State Geologist determines the information is appropriate for use by local government. The State Geologist shall not be required to provide this information unless additional funding is provided both to make the determination and to distribute the tsunami and seiche information.

2693. As used in this chapter:

- a) "City" and "county" includes the City and County of San Francisco.
- b) "Geotechnical report" means a report prepared by a certified engineering geologist or a civil engineer practicing within the area of his or her competence, which identifies seismic hazards and recommends mitigation measures to reduce the risk of seismic hazard to acceptable levels.
- c) "Mitigation" means those measures that are consistent with established practice and that will reduce seismic risk to acceptable levels.
- d) "Project" has the same meaning as in Chapter 7.5 (commencing with Section 2621), except as follows:
 - 1) A single-family dwelling otherwise qualifying as a project may be exempted by the City or county having jurisdiction of the project.

- 2) "Project" does not include alterations or additions to any structure within a seismic hazard zone which do not exceed either 50 percent of the value of the structure or 50 percent of the existing floor area of the structure.
- e) "Commission" means the Seismic Safety Commission.
- f) "Board" means the State Mining and Geology Board.

- 2694.**
- a) A person who is acting as an agent for a transferor of real property that is located within a seismic hazard zone, as designated under this chapter, or the transferor, if he or she is acting without an agent, shall disclose to any prospective transferee the fact that the property is located within a seismic hazard zone.
 - b) Disclosure is required pursuant to this section only when one of the following conditions is met:
 - 1) The transferor, or transferor's agent, has actual knowledge that the property is within a seismic hazard zone.
 - 2) A map that includes the property has been provided to the city or county pursuant to Section 2622, and a notice has been posted at the offices of the county recorder, county assessor, and county planning agency that identifies the location of the map and any information regarding changes to the map received by the county.
 - c) In all transactions that are subject to Section 1103 of the Civil Code, the disclosure required by subdivision (a) of this section shall be provided by either of the following means:
 - 1) The Local Option Real Estate Transfer Disclosure Statement as provided in Section 1102.6a of the Civil Code.
 - 2) The Natural Hazard Disclosure Statement as provided in Section 1103.2 of the Civil Code.
 - d) If the map or accompanying information is not of sufficient accuracy or scale that a reasonable person can determine if the subject real property is included in a seismic hazard zone, the agent shall mark "Yes" on the Natural Hazard Disclosure Statement. The agent may mark "No" on the Natural Hazard Disclosure Statement if he or she attaches a report prepared pursuant to subdivision (c) of Section 1103.4 of the Civil Code that verifies the property is not in the hazard zone. Nothing in this subdivision is intended to limit or abridge any existing duty of the transferor or the transferor's agents to exercise reasonable care in making a determination under this subdivision.
 - e) For purposes of the disclosures required by this section, the following persons shall not be deemed agents of the transferor:
 - 1) Persons specified in Section 1103.11 of the Civil Code.
 - 2) Persons acting under a power of sale regulated by Section 2924 of the Civil Code.
 - f) For purposes of this section, Section 1103.13 of the Civil Code applies.
 - g) The specification of items for disclosure in this section does not limit or abridge any obligation for disclosure created by any other provision of law or that may exist in order to avoid fraud, misrepresentation, or deceit in the transfer transaction.

- 2695.**
- a) On or before January 1, 1992, the board, in consultation with the director and the commission, shall develop all of the following:
 - 1) Guidelines for the preparation of maps of seismic hazard zones in the state.
 - 2) Priorities for mapping of seismic hazard zones. In setting priorities, the board shall take into account the following factors:
 - A) The population affected by the seismic hazard in the event of an earthquake.
 - B) The probability that the seismic hazard would threaten public health and safety in the event of an earthquake.
 - C) The willingness of lead agencies and other public agencies to share the cost of mapping within their jurisdiction.
 - D) The availability of existing information.

- 3) Policies and criteria regarding the responsibilities of cities, counties, and state agencies pursuant to this chapter. The policies and criteria shall address, but not be limited to, the following:
 - A) Criteria for approval of a project within a seismic hazard zone, including mitigation measures.
 - B) The contents of the geotechnical report.
 - C) Evaluation of the geotechnical report by the lead agency.
- 4) Guidelines for evaluating seismic hazards and recommending mitigation measures.
- 5) Any necessary procedures, including, but not limited to, processing of waivers pursuant to Section 2697, to facilitate the implementation of this chapter.
- b) In developing the policies and criteria pursuant to subdivision (a), the board shall consult with and consider the recommendations of an advisory committee, appointed by the board in consultation with the commission, composed of the following members:
 - 1) An engineering geologist registered in the state.
 - 2) A seismologist.
 - 3) A civil engineer registered in the state.
 - 4) A structural engineer registered in the state.
 - 5) A representative of county government, selected from a list submitted by the League of California Cities.
 - 6) A representative of county government, selected from a list submitted by the County Supervisors Association of California.
 - 7) A representative of regional government, selected from a list submitted by the Council of Governments.
 - 8) A representative of the insurance industry.
 - 9) The Insurance Commissioner.

All of the members of the advisory committee shall have expertise in the field of seismic hazards or seismic safety.
- c) At least 90 days prior to adopting measures pursuant to this section, the board shall transmit or cause to be transmitted a draft of those measures to affected cities, counties, and state agencies for review and comment.

- 2696.**
- a) The State Geologist shall compile maps identifying seismic hazard zones, consistent with the requirements of Section 2695. The maps shall be compiled in accordance with a time schedule developed by the director and based upon the provisions of Section 2695 and the level of funding available to implement this chapter.
 - b) The State Geologist shall, upon completion, submit seismic hazard maps compiled pursuant to subdivision (a) to the board and all affected cities, counties, and state agencies for review and comment. Concerned jurisdictions and agencies shall submit all comments to the board for review and consideration within 90 days. Within 90 days of board review, the State Geologist shall revise the maps, as appropriate, and shall provide copies of the official maps to each state agency, city, or county, including the county recorder, having jurisdiction over lands containing an area of seismic hazard. The county recorder shall record all information transmitted as part of the public record.
 - c) In order to ensure that sellers of real property and their agents are adequately informed, any county that receives an official map pursuant to this section shall post a notice within five days of receipt of the map at the office of the county recorder, county assessor, and county planning agency, identifying the location of the map, any information regarding changes to the map, and the effective date of the notice.

- 2697.**
- a) Cities and counties shall require, prior to the approval of a project located in a seismic hazard zone, a geotechnical report defining and delineating any seismic hazard. If the city or county finds that no undue hazard of this kind exists, based on information resulting from studies conducted on sites in the

immediate vicinity of the project and of similar soil composition to the project site, the geotechnical report may be waived. After a report has been approved or a waiver granted, subsequent geotechnical reports shall not be required, provided that new geologic datum, or data, warranting further investigation is not recorded. Each city and county shall submit one copy of each approved geotechnical report, including the mitigation measures, if any, that are to be taken, to the State Geologist within 30 days of its approval of the report.

- b) In the meeting the requirements of this section, cities and counties shall consider the policies and criteria established pursuant to this chapter. If a project's approval is not in accordance with the policies and criteria, the city or county shall explain the reasons for the differences in writing to the State Geologist, within 30 days of the project's approval.

2698. Nothing in this chapter is intended to prevent cities and counties from establishing policies and criteria, which are more strict than those established by the board.

2699. Each city and county, in preparing the safety element to its general plan pursuant to subdivision (g) of Section 65302 of the Government Code, and in adopting or revising land use planning and permitting ordinances, shall take into account the information provided in available seismic hazard maps.

- 2699.5
- a) There is hereby created the Seismic Hazards Identification Fund, as a special fund in the State Treasury.
 - b) Upon appropriation by the Legislature, the moneys in the Strong-Motion Instrumentation and Seismic Hazards Mapping Fund shall be allocated to the division for purposes of this chapter and Chapter 8 (commencing with Section 2700).
 - c) On and after July 1, 2004, the Seismic Hazards Identification Fund shall be known as the Strong-Motion Instrumentation and Seismic Hazards Mapping Fund.

2699.6 This chapter shall become operative on April 1, 1991.

SEISMIC HAZARDS MAPPING REGULATIONS

CALIFORNIA CODE OF REGULATIONS

Title 14. Natural Resources

Division 2. Department of Conservation

Chapter 8. Mining and Geology

Article 10. Seismic Hazards Mapping

3720. Purpose

These regulations shall govern the exercise of city, county and state agency responsibilities to identify and map seismic hazard zones and to mitigate seismic hazards to protect public health and safety in accordance with the provisions of the Public Resources Code, section 2690 et seq. (Seismic Hazards Mapping Act).

Authority cited: Section 2695, Public Resources Code.

Reference: Section 2695(a)(1) and (3)-(5), Public Resources Code.

3721. Definitions.

- a) "Acceptable Level" means that level that provides reasonable protection of the public safety, though it does not necessarily ensure continued structural integrity and functionality of the project.
- b) "Lead Agency" means the city, county or state agency with the authority to approve projects.
- c) "Registered civil engineer" or "certified engineering geologist" means a civil engineer or engineering geologist who is registered or certified in the State of California.

Authority cited: Section 2695, Public Resources Code.

Reference: Sections 2690-2696.6, Public Resources Code.

3722. Requirements for Mapping Seismic Hazard Zones

- a) The Department of Conservation, Division of Mines and Geology, shall prepare one of more statewide probabilistic ground shaking maps for suitably defined reference soil column. One of the maps shall show ground shaking levels which have a 10% probability of being exceeded in 50 years. These maps shall be used with the following criteria to define seismic hazard zones:
 - 1) Amplified shaking hazard zones shall be delineated as areas where historic occurrence of amplified ground shaking, or local geological and geotechnical conditions indicate a potential for ground shaking to be amplified to a level such that mitigation as defined in Public Resources Code Section 2693(c) would be required.
 - 2) Liquefaction hazard zones shall be delineated as areas where historic occurrence of liquefaction, or local geological, geotechnical and ground water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required.
 - 3) Earthquake-induced landslide hazard zones shall be delineated as areas where Holocene occurrence of landslide movement, or local slope of terrain, and geological, geotechnical and ground moisture conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693(c) would be required.
- b) Highest priority for mapping seismic hazard zones shall be given to areas facing urbanization or redevelopment in conjunction with the factors listed in section 2695(a)(2)(A), (B), (C) and (D) of the Public Resources Code.

3723. Review of Preliminary Seismic Hazard Zones Maps.

- a) The mining and Geology Board shall provide an opportunity for receipt of public comments and recommendations during the 90-day period for review of preliminary seismic hazard zone maps provided by the Public Resources Code Section 2696. At least one public hearing shall be scheduled for that purpose.
- b) Following the end of the review period, the Board shall forward its comments and recommendations, with supporting data received, to the State Geologist for consideration prior to revision and official issuance of the maps.

3724. Specific Criteria for Project Approval.

The following specific criteria for project approval shall apply within seismic hazard zones and shall be used by affected lead agencies in complying with the provisions of the Act:

- a) A project shall be approved only when the nature and severity of the seismic hazards at the site have been evaluated in a geotechnical report and appropriate mitigation measures have been proposed.
- b) The geotechnical report shall be prepared by a registered civil engineer or certified engineering geologist, having competence in the field of seismic hazard evaluation and mitigation. The geotechnical report shall contain site-specific evaluation of the seismic hazard affecting the project, and shall identify portions of the project site containing seismic hazards. The report shall also identify off-site seismic hazards that could adversely affect the site in the event of an earthquake. The contents of the geotechnical report shall include, but shall not be limited, the following:
 - 1) Project description.
 - 2) A description of the geologic and geotechnical conditions at the site, including an appropriate site location map.
 - 3) Evaluation of site-specific seismic hazards based on geological and geotechnical conditions, in accordance with current standards of practice.
 - 4) Recommendations for appropriate mitigation measures as required in section 3724 (a), above
 - 5) Name of report preparer(s), and signature(s) of a certified engineering geologist and/or registered civil engineer, having competence in the field of seismic hazard evaluation and mitigation.
- c) Prior to approving the project, the lead agency shall independently review the geotechnical report to determine the adequacy of the hazard evaluation and proposed mitigation measures and to determine that the requirements of section 3724 (a), above, are satisfied. Such reviews shall be conducted by a certified engineering geologist or registered civil engineer, having competence in the field of seismic hazard evaluation and mitigation.

3725. Waivers of Geotechnical Report Requirements.

For a specific project, the lead agency may determine that the geological and geotechnical conditions at the site are such that public safety is adequately protected and no mitigation is required. This finding shall be based on a report presenting evaluations of sites in the immediate vicinity having similar geologic and geotechnical characteristics. The report shall be prepared by a certified engineering geologist or registered civil engineer, having competence in the field of seismic hazard evaluation and mitigation. The lead agency shall review submitted reports in the same manner as in section 372(c) of this article. The lead agency shall also provide a written commentary that addresses the report conclusions and the justification for applying the conclusions contained in the report to the project site. When the lead agency makes such a finding, it may waive the requirement of a geotechnical report for the project. All such waivers shall be recorded with the county recorder and a separate copy, together with the report and the commentary, filed with the State Geologist within 30 days of the waiver.

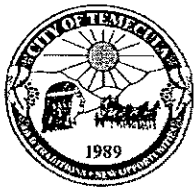
Authority cited: Section 2695, Public Resources Code.

Reference: Section 2697(a)(5), Public Resources Code.

APPENDIX L

"HAUL ROUTE PERMIT APPLICATION"

L



PUBLIC WORKS DEPARTMENT

Land Development Division

41000 Main Street * Temecula, CA 92590

* www.cityoftemecula.org *

PERMIT NO.: _____

PA No.: _____

HAUL ROUTE PERMIT APPLICATION

When soils, construction materials or debris are to be moved on public roadways from or to the site of a grading operation (or temporary stockpile site), a haul route plan shall be approved by the City Engineer in accordance with Title 18 of the City of Temecula Municipal Code, Section 18.09.060, Haul Route Requirements.

APPLICANT / CONTRACTOR

COMPANY NAME: _____

MAILING ADDRESS: _____

STATE & ZIP: _____

COMPANY PHONE #: _____

24-HR EMERGENCY #: _____

STATE CONTRACTOR'S LICENSE NO.: _____

CITY BUSINESS LICENSE NO.: _____

CONTACT: _____

24-HR EMERGENCY #: _____

HAUL ROUTE INFO

IMPORT SITE ADDRESS: _____

EXPORT SITE ADDRESS: _____

MATERIAL TO BE HAULED: _____

ROUTE THROUGH TEMECULA: _____

DATES: FROM _____ To _____ HOURS: FROM _____ To _____ QUANTITY: _____ (CUBIC YARDS)

TYPE OF TRUCKS: _____

NO. OF TRUCKS PER DAY: _____

The applicant guarantees to save, indemnify and hold harmless the City of Temecula and all its agents, officers, employees and officials against all liabilities, judgments, costs and expenses which may in any manner or form arise in consequence to any work performed pursuant to this application:

APPLICANT'S NAME (PRINT): _____

TITLE: _____

APPLICANT'S SIGNATURE: _____

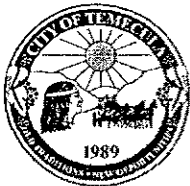
DATE: _____

GENERAL INFORMATION

1. A Haul Route Plan must be submitted with a Haul Route Application. The Haul Route Plan must be approved prior to issuance of a grading permit. The approved Haul Route Plan must be kept on the job site at all times. A deviation from the plan requires approval from the City. (Any portion of the haul route that is located in Riverside County or another City is subject to review and approval by that public agency.)
2. At least 24 hours before the hauling is to commence, the applicant shall notify the City.
3. Haul Route plans expire 6 months from the date the application is submitted.
4. Tracking onto City streets is prohibited and shall be prevented at all times. The contractor shall be responsible for maintaining public right-of-ways used for hauling purposes in a condition free of dust, soils and debris. Haul vehicles will comply with the freeboard requirements of Section 23114 of the California Vehicle Code for both public and private roads.
5. Loading and transportation of hauled materials shall be accomplished within the time limitations established in Title 18 of the Municipal Code Section 18.06.380, Time of Operations. The City reserves the right to limit the number of trucks and hours of operation depending upon the location of the project and impacts to traffic circulation.
6. Disposal of all waste and recycling materials removed as part of any grading project shall be in compliance with the City's Solid Waste Franchise Agreement. Questions regarding the removal of construction waste or recyclable materials shall be directed to the City of Temecula's Community Development at (951) 694-6400.
7. The City may require that a security amount be submitted in cash, in a form immediately available to the City, to correct any deficiency or public safety hazard created by the hauling operation or in violation of the permit.
8. The last 50 feet of access road, as it approaches the intersection with the public roadway, shall be constructed of gravel or equivalent material to prevent mud and debris from tracking onto the public street.
9. There must be 300 feet clear unobstructed sight distance to the intersection from both the public roadway and the access road. (If this sight distance cannot be obtained, flagmen shall be posted.)
10. Advance warning signs shall be posted on the public roadway 400' on either side of the access intersection, the sign shall be a W8-6 "Trucks Crossing" with an orange background; black legend. The standard size of a W8-6 sign is 30 inches. The temporary sign shall be placed in the right of way, as approved by the City Engineer. The sign shall be placed in such a way as to avoid conflicts with pedestrians, bicycles or equestrian traffic signs shall be covered or removed when the access is not in use.
11. A temporary R1 "stop" stop sign conforming to the requirements of the 2012 California Manual of Uniform Traffic Control Devices (MUTCD) shall be posted at the entrance of the access road to the public roadway.
12. Any other necessary traffic control measures shall be used including police officers, flagmen, signs, barricades, detours, etc.

APPENDIX M “ENCROACHMENT PERMIT APPLICATION”

M



PUBLIC WORKS DEPARTMENT

Land Development Division

41000 Main Street * Temecula, CA 92590

* www.cityoftemecula.org *

PERMIT NO.: _____ PA No.: _____

ENCROACHMENT PERMIT APPLICATION

TYPE OF ENCROACHMENT: ☐ STREET / STORM DRAIN ☐ SEWER / WATER ☐ TRAFFIC SIGNAL
TYPE OF SUBMITTAL: ☐ SIGNING & STRIPING ☐ UTILITY TRENCHING ☐ MISCELLANEOUS (SPECIFY BELOW)

THE UNDERSIGNED HEREBY APPLIES TO EXCAVATE, CONSTRUCT AND OTHERWISE ENCROACH ON CITY STREET RIGHT-OF-WAY AS FOLLOWS: _____

NAME(S) OF STREET(S) AND/OR STREET ADDRESS: _____

UTILITY WORK ORDER # _____ START DATE _____ FINISH DATE _____

In consideration of the granting of this application, all applicants including utility companies hereby agree to:

1. **IF APPLICABLE**, submit two (2) sets of Construction Drawings along with two (2) sets of the appropriate Traffic Control Plan along with this application at the time of submittal. See the Traffic Control Plan Checklist for details.
2. Indemnify, defend and save the City, its authorized agents, officers, representatives and employees, harmless from and against any and all penalties, liabilities or loss resulting from claims or court action and arising out of any accident, loss or damage to persons or property happening or occurring as a proximate result of any work undertaken under the permit granted pursuant to this application. (See page 2 for specific liability insurance requirements)
3. Remove or relocate an encroachment installed or maintained under this permit, upon written notice from the City Engineer.
4. Notify the Land Development Inspection Division (951-308-6395) at least two (2) working days prior to commencing construction. Hold a pre-construction meeting prior to the start of construction for major improvements. The developer or general contractor will be responsible for the timely request of inspections.
5. Comply with the Standard Specifications and the most current Improvement Standard Drawings for Public Works Construction, Municipal Code Chapters 13.04 and 18.12, the terms and conditions of the permit and all applicable rules and regulations for the City of Temecula and other public agencies having jurisdiction.

LIABILITY INSURANCE REQUIREMENTS

PROVIDE PROOF OF INSURANCE COVERAGE MEETING THE REQUIREMENTS STATED BELOW OR A CITY ATTORNEY APPROVED EQUIVALENT WITH THE CITY NAMED AS ADDITIONAL INSURED. IN THE EVENT THAT THE INSURANCE IS PROVIDED BY THE CONTRACTOR, THE CITY AND THE OWNER/DEVELOPER MUST BE NAMED AS ADDITIONAL INSURED. ENCROACHMENT PERMITS WILL NOT BE ISSUED WITHOUT THE PROPER INSURANCE.

THIS REQUIREMENT SHALL BE MET BY EITHER THE APPLICANT (DEVELOPER, OWNER, PUBLIC UTILITY AGENCY OR FRANCHISE) OR BY THE CONTRACTOR PERFORMING THE SUBJECT WORK, PRIOR TO BEGINNING ANY OF THE WORK PROPOSED UNDER THE SUBJECT ENCROACHMENT PERMIT.

Proof of coverage shall be by certificate (Accord or equivalent) naming the City of Temecula as certificate holder and the minimum coverage shall be per Section 7-3 "Liability Insurance", Standard Specifications for Public Works Construction, most current edition. The minimum limits of the insurance are as follows:

- a) **General Liability:** One million dollars (\$1,000,000) per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
- b) **Automobile Liability:** One million dollars (\$1,000,000) per accident for bodily injury and property damage.
- c) **Worker's Compensation as required by the State of California; Employer's Liability:** One million dollars (\$1,000,000) per accident for bodily injury or disease.
- d) **Course of Construction:** Completed value of the project.

The exceptions to this requirement are property owners doing work on their own properties. When submitting an encroachment permit application, the property owner must adjoin their proof of appropriate public liability and property damage insurance, homeowner's insurance, with the following minimum limits:

BODILY INJURY	\$250,000.00	EACH PERSON
	\$500,000.00	EACH OCCURRENCE
	\$500,000.00	AGGREGATE PRODUCTS AND COMPLETED OPERATIONS
PROPERTY DAMAGE	\$100,000.00	EACH OCCURRENCE
	\$250,000.00	AGGREGATE PRODUCTS AND COMPLETED OPERATIONS

A COMBINED SINGLE LIMIT POLICY WITH AGGREGATE LIMITS IN THE AMOUNT OF \$1,000,000.00 WILL BE CONSIDERED EQUIVALENT TO THE REQUIRED MINIMUM LIMITS.

The undersigned applicant and/or contractor states that he has read the conditions on this application, and agrees to meet these conditions, including provision of required liability insurance or a City Attorney approved equivalent, and acknowledges that this application will be made a part of the encroachment permit:

APPLICANT (THIS SECTION MUST BE COMPLETED)

COMPANY NAME: _____

MAILING ADDRESS: _____

CONTACT: _____ PHONE #: _____ E-MAIL: _____

I HEREBY WARRANT AND REPRESENT TO THE CITY THAT I AM AUTHORIZED TO EXECUTE THIS PERMIT APPLICATION ON BEHALF OF THE PERMITTEE AND BIND THE PERMITTEE TO THE AGREEMENTS CONTAINED HEREIN AND ANY CONDITIONS OF THE PERMIT.

AUTHORIZED SIGNATURE: _____ DATE APPLIED: _____

CONTRACTOR'S INFORMATION

COMPANY NAME: _____

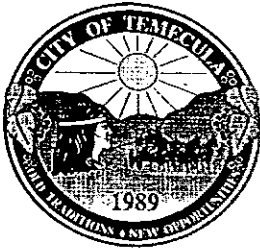
MAILING ADDRESS: _____

CONTACT: _____ PHONE #: _____ 24-HR EMERGENCY #: _____

STATE CONTRACTOR'S LICENSE #: _____ CLASS: _____ CITY BUSINESS LICENSE #: _____

APPENDIX N "TCP GUIDELINES AND GENERAL NOTES"

N



TRAFFIC CONTROL PLAN CHECKLIST

The basic objective of each traffic control plan (TCP) is to permit the contractor to work within the public right of way efficiently and effectively while maintaining a safe, uniform flow of traffic. The construction work and the public traveling through the work zone in vehicles, bicycles or as pedestrians must be given equal consideration when developing a traffic control plan.

A TCP shall be required for all work performed within the public right-of-way. Each traffic control plan shall be developed consistent with the Manual on Uniform Traffic Control Devices (MUTCD), as specified in the Guidelines below. The information included on a traffic control plan will vary depending upon the complexity of the project, the volume of traffic affected and the roadway geometrics where the construction is being performed. The TCP must clearly depict the exact sequence of the construction operations, the construction to be performed, and the traveled way that will be utilized by all movements of traffic during each phase of construction. Multiple phases of construction will require a separate traffic control plan for each different construction phase or operation

The purpose of our Guidelines is to ensure that all of the basic elements of traffic control are included on the plan and are clear to the reviewers and implementers in the field and to facilitate processing and archiving of the documents. This will help expedite the plan review process. Following the submittal of traffic control plans, all submittals deemed complete shall be reviewed within three (3) weeks.

A traffic control plan that does not include each of the appropriate elements listed below will be deemed incomplete and returned for revision and re-submittal. Traffic control plans shall be submitted in a timely manner to allow for the specified review period. It is important to note that each TCP must be developed specific to the actual construction work zone location. Approved traffic control plan will be reviewed at the pre-construction conference.

TRAFFIC CONTROL PLAN CRITERIA

- Follow City Guidelines, see below
- Include City General Notes on TCP, with Revision Date, see below
- Include City Signature Block (scale to approximately 5x2" to allow space for signatures)

CITY OF TEMECULA	
RECOMMENDED BY	DATE:
ACCEPTED BY GREG BUTLER DIRECTOR OF PUBLIC WORKS/CITY ENGINEER R.C.E. NO. 47109	DATE

Revised on 11/28/11

TRAFFIC CONTROL PLAN GUIDELINES

1. TCP shall be drawn on 24" x 36", unless otherwise approved by the Department of Public Works. TCP's prepared for work occurring on streets shown on the Circulation Element of the General Plan shall be:
 - Prepared to scale on 24" x 36" plan sheets,
 - Signed and Stamped by a Registered Civil Engineer or Registered Traffic Engineer,
 - Submitted in AutoCAD (DXF or DWG) or other Traffic Division approved electronic format,
 - Final submission on bond paper, unless otherwise approved by the Department of Public Works (PW), in advance.
2. TCP must use legible lettering and clear, contrasting, symbols for viewing or printing.
3. In some cases, where field conditions match **exactly**, a Standard Template as shown on our the City web site in the **Improvement Standard Drawings** web page may be used, in lieu of a custom TCP, as approved by the Director of Public Works.
4. Indicate contractor's name, address, and telephone number. Include name and telephone number of the 24-hour contact person representing the contractor.
5. Indicate north arrow and scale, unless otherwise approved by the Department of Public Works.
6. Show all nearby streets with street names to assure proper orientation.
7. Show existing traffic signals and regulatory signs within the work area and affected construction zone.
8. Show existing striping, pavement markings, painted crosswalks, and bike lanes area within the work area and affected construction zone.
9. Show existing curbs, gutters, sidewalks, driveways and intersections in the construction work zone including areas affected by taper transition.
10. **Dimension** all existing striping and proposed traffic control area within the work area and affected construction zone.
11. Indicate posted speed limits.
12. Show location and dimensions of the construction work zone.
13. Show staging area and materials storage area, as appropriate.
14. Indicate location of construction signs, barricades, and delineators.
15. Label all taper lengths and widths, delineator spacing and sign spacing. (Spacing of channelizing devices should not exceed 25' for speeds under 55 MPH.)
16. Use a legend to define all signs and symbols and designate them with MUTCD nomenclature.
17. Show existing and proposed temporary parking restriction zones and signs, as needed, within the work area.
18. Road closures will require approval from the Director of Public Works and the City Council.
19. Signs and barricades will be required to direct **pedestrians** through or around the construction work zone and shall be shown on the TCP.
20. Indicate the encroachment permit number or improvement plan number on the traffic control plan.
21. Indicate on the plan the duration of the construction work and subsequent traffic control (include type of work and estimated start date, as appropriate).
22. Please reference the revision date of the "TRAFFIC CONTROL PLAN GUIDELINES" document to ensure that you are using the latest edition.

Revised on 11/28/11

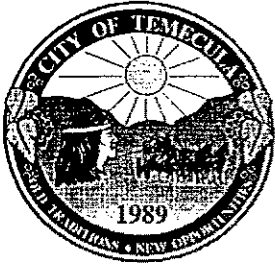
GENERAL NOTES

1. All traffic control devices shall conform to the latest edition of the California Manual on Uniform Traffic Control Devices (California MUTCD) and the Standard Specifications for Public Works Construction.
2. The City Engineer or his representative has the authority to initiate field changes to assure public safety.
3. All traffic control devices shall be removed from view when not in use.
4. Work hours shall be restricted to the period between 8:30 a.m. and 3:30 p.m., Monday through Friday, unless approved otherwise. When night work is required, work hours shall be 9 p.m. to 5 a.m., Sunday through Thursday.
5. Trenches must be back filled or plated during non-working hours.
6. Pedestrian controls shall be provided as shown on the plans.
7. Temporary "NO PARKING" signs will be posted 24 hours prior to commencing work.
8. Access to driveways will be maintained at all times unless other arrangements are made.
9. The contractor shall replace within 72 hours, all traffic signal loop detectors damaged during construction.
10. The contractor shall replace within 24 hours, all striping removed or damaged by construction work. (Striping may be replaced temporarily with tape.)
11. All Workers shall be equipped with an orange vest (or a reflective vest at night). All flaggers shall also be equipped with a hard hat, C28 "Stop/Slow" paddle and shall be trained in the proper fundamentals of flagging traffic.
12. Any work that disturbs normal traffic signal operations shall be coordinated with the City of Temecula's Traffic Division, 48 hours prior to beginning construction. Contact the City's Traffic Division at (951) 694 -6411.
13. The contractor shall maintain all traffic control devices 24 hours per day and 7 days per week.
14. A minimum of **twelve (12) foot** travel lanes must be maintained unless otherwise approved by the Department of Public Works.
15. All night work will require written approval from the Department of Public Works. Lane closures, road detours, road closures, and traffic signal modifications associated with overnight construction activities will require warning signs be placed at least one week in advance of starting construction.
16. A **solar powered** flashing arrow board shall be required on all arterial street lane closures.

Revised on 11/28/11

APPENDIX O "CONTENT OF A CONSTRUCTION PLAN"

O



DEPARTMENT OF PUBLIC WORKS LAND DEVELOPMENT DIVISION

"CONTENT OF A CONSTRUCTION PLAN"

Construction plans shall be submitted on a standard 24" x 36" (D size) bond copy for review and shall include the City's standard title block and applicable standard notes. The content of a construction plan shall generally include:

1. Title Sheet.
 - a. Contact information for the applicant, owner and civil engineer.
 - b. Contact information for the 24-hour contact person responsible for the site.
 - c. Legend, north arrow, bar scale, vicinity map.
 - d. Benchmark information.
 - e. Planning Application (PA) number and project name, if applicable.
 - f. Date and source of topography.
 - g. All standard construction notes.
 - h. Summary of itemized construction item with quantities and units also shown on each sheet.
2. The engineering scale of the plan shall not exceed 1" = 40'.
3. The lettering size on the plan shall be a minimum of 0.10".
4. The plan shall be oriented so that the "North Arrow" is specified at the top right side of each page.
5. All existing and proposed items on the construction plan shall be drawn to scale and clearly defined. This includes curbs, sidewalks, striped lanes and centerlines.
6. Show and label all right-of-way lines.
7. Show location and label all existing and proposed fire hydrants.
8. Show details (plan and section) of all surface and underground drainage devices and other protective devices to be constructed with or as part of the proposed work and the calculated runoff of the area served by any drain and the calculated carrying capacity of such drains.
9. Show location and dimension of all proposed public improvements.
10. Show location and label all known existing utilities (water, sewer, etc.).
11. Show location and label all known existing and proposed natural and man-made drainage and flood control facilities.
12. Show location and label all existing trees that will be impacted by construction.
13. Show location of existing vegetation types and the location and type of vegetation to be left undisturbed.
14. Show typical cross sections (streets, storm drain, utilities, etc.).
15. Any additional plans, drawings, calculations or other reports required by the City.

APPENDIX P "CALIFORNIA BUILDING CODE'S APPENDIX J - GRADING"

P

APPENDIX J

GRADING

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

SECTION J101 GENERAL

J101.1 Scope. The provisions of this chapter apply to grading, excavation and earthwork construction, including fills and embankments. Where conflicts occur between the technical requirements of this chapter and the geotechnical report, the geotechnical report shall govern.

J101.2 Flood hazard areas. The provisions of this chapter shall not apply to grading, excavation and earthwork construction, including fills and embankments, in *floodways* within *flood hazard areas* established in Section 1612.3 or in *flood hazard areas* where design *flood* elevations are specified but floodways have not been designated, unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed work will not result in any increase in the level of the base flood.

SECTION J102 DEFINITIONS

J102.1 Definitions. For the purposes of this appendix chapter, the terms, phrases and words listed in this section and their derivatives shall have the indicated meanings.

BENCH. A relatively level step excavated into earth material on which fill is to be placed.

COMPACTION. The densification of a fill by mechanical means.

CUT. See Excavation.

DOWN DRAIN. A device for collecting water from a swale or ditch located on or above a slope, and safely delivering it to an approved drainage facility

EROSION. The wearing away of the ground surface as a result of the movement of wind, water or ice.

EXCAVATION. The removal of earth material by artificial means, also referred to as a cut.

FILL. Deposition of earth materials by artificial means.

GRADE. The vertical location of the ground surface.

GRADE, EXISTING. The grade prior to grading.

GRADE, FINISHED. The grade of the site at the conclusion of all grading efforts.

GRADING. An excavation or fill or combination thereof.

KEY. A compacted fill placed in a trench excavated in earth material beneath the toe of a slope.

SLOPE. An inclined surface, the inclination of which is expressed as a ratio of horizontal distance to vertical distance.

TERRACE. A relatively level step constructed in the face of a graded slope for drainage and maintenance purposes.

SECTION J103 PERMITS REQUIRED

J103.1 Permits required. Except as exempted in Section J103.2, no grading shall be performed without first having obtained a *permit* therefor from the *building official*. A *grading permit* does not include the construction of retaining walls or other structures.

J103.2 Exemptions. A *grading permit* shall not be required for the following:

1. Grading in an isolated, self-contained area, provided there is no danger to the public, and that such grading will not adversely affect adjoining properties.
2. Excavation for construction of a structure permitted under this code.
3. Cemetery graves.
4. Refuse disposal sites controlled by other regulations.
5. Excavations for wells, or trenches for utilities.
6. Mining, quarrying, excavating, processing or stockpiling rock, sand, gravel, aggregate or clay controlled by other regulations, provided such operations do not affect the lateral support of, or significantly increase stresses in, soil on adjoining properties.
7. Exploratory excavations performed under the direction of a registered design professional.

Exemption from the permit requirements of this appendix shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction.

SECTION J104 PERMIT APPLICATION AND SUBMITTALS

J104.1 Submittal requirements. In addition to the provisions of Section 105.3, the applicant shall state the estimated quantities of excavation and fill.

J104.2 Site plan requirements. In addition to the provisions of Section 107, a grading plan shall show the existing grade and finished grade in contour intervals of sufficient clarity to indicate the nature and extent of the work and show in detail that it complies with the requirements of this code. The plans shall show the existing grade on adjoining properties in sufficient detail to identify how grade changes will conform to the requirements of this code.

J104.3 Geotechnical report. A geotechnical report prepared by a *registered design professional* shall be provided. The report shall contain at least the following:

1. The nature and distribution of existing soils;
2. Conclusions and recommendations for grading procedures;
3. Soil design criteria for any structures or embankments required to accomplish the proposed grading; and
4. Where necessary, slope stability studies, and recommendations and conclusions regarding site geology.

Exception: A geotechnical report is not required where the building code official determines that the nature of the work applied for is such that a report is not necessary.

J104.4 Liquefaction study. For sites with mapped maximum considered earthquake spectral response accelerations at short periods (S_s) greater than 0.5g as determined by Section 1613, a study of the liquefaction potential of the site shall be provided, and the recommendations incorporated in the plans.

Exceptions:

1. A liquefaction study is not required where the building official determines from established local data that the liquefaction potential is low.
2. [OSHDP 1, 2, & 4] *Exception 1 not permitted by OSHPD.*

SECTION J105 INSPECTIONS

J105.1 General. Inspections shall be governed by Section 109, *Chapter 1, Division II* of this code.

J105.2 Special inspections. The special inspection requirements of Section 1704.7 shall apply to work performed under a grading permit where required by the *building official*.

SECTION J106 EXCAVATIONS

J106.1 Maximum slope. The slope of cut surfaces shall be no steeper than is safe for the intended use, and shall be no steeper than two units horizontal to one unit vertical (50-percent slope) unless the owner or authorized agent furnishes a geotechnical report justifying a steeper slope.

Exceptions:

1. A cut surface shall be permitted to be at a slope of 1.5 units horizontal to one unit vertical (67-percent slope) provided that all of the following are met:
 - 1.1. It is not intended to support structures or surcharges.
 - 1.2. It is adequately protected against erosion.
 - 1.3. It is no more than 8 feet (2438 mm) in height.
 - 1.4. It is approved by the building code official.
 - 1.5. Ground water is not encountered.

2. A cut surface in bedrock shall be permitted to be at a slope of one unit horizontal to one unit vertical (100-percent slope).

J106.2 Earth Retaining Shoring. [OSHDP 1 & 4]

J106.2.1 General. The requirements of this section shall apply to temporary and permanent earth retaining shoring using soldier piles and lagging with or without tie-back anchors in soil or rock, only when existing or new OSHPD 1 or 4 facilities are affected. Shoring used as construction means and methods only, which does not affect existing or new OSHPD 1 or 4 facilities, are not regulated by OSHPD and shall satisfy the requirements of the authorities having jurisdiction.

Design, construction, testing and inspection shall satisfy the requirements of this code except as modified in Sections J106.2.2 through J106.2.8.

J106.2.2 Duration. Shoring shall be considered temporary when elements of the shoring will be exposed to site conditions for a period of less than one (1) year, and shall be considered permanent otherwise. Permanent shoring shall account for the increase in lateral soil pressure due to earthquake. At the end of the construction period, the existing and new structures shall not rely on the temporary shoring for support in anyway. Wood components shall not be used for permanent shoring lasting more than two (2) years. Wood components of the temporary shoring that may affect the performance of permanent structure shall be removed after the shoring is no longer required.

All components of the shoring shall have corrosion protection or preservative treatment for their expected duration. Wood components of the temporary shoring that will not be removed shall be treated in accordance with AWWA U1 (Commodity Specification A, Use Category 4B and Section 5.2), and shall be identified in accordance with Section 2303.1.8.1.

J106.2.3 Surcharge. Surcharge pressure due to footings, traffic or other sources shall be considered in design. If the footing surcharge is located within the semicircular distribution or bulb of earth pressure (when shoring is located close to a footings), lagging shall be designed for lateral earth pressure due to footing surcharge. Soil arching effects may be considered in the design of lagging. Underpinning of the footing may be used in lieu of designing the shoring and lagging for surcharge pressure. Alternatively, continuously contacting drilled pier shafts near the footings shall be permitted. The lateral surcharge design pressure shall be derived using Boussinesq equations modified for the distribution of stresses in an elastic medium due to a uniform, concentrated or line surface load as appropriate and soil arching effects.

J106.2.4 Design and testing. Except for the modifications as set forth in Sections J106.2.4.1 and J106.2.4.2 below, all prestressed rock and soil tie-back anchors shall be designed and tested in accordance with PTI Recommendations for Prestressed Rock and Soil Anchors (PTI-2004).

J106.2.4.1 Geotechnical requirements. The geotechnical report for the earth retaining shoring shall address the following:

1. Minimum diameter and minimum spacing for the anchors including consideration of group effects.
2. Maximum unbonded length and minimum bonded length of the tie-back anchors.
3. Maximum recommended anchor tension capacity based upon the soil or rock strength/grout bond and anchor depth/spacing.
4. Allowable bond stress at the ground/grout interface and applicable factor of safety for ultimate bond stress for the anchor. For permanent anchors, a minimum factor of safety of 2.0 shall be applied to ground soil interface as required by PTI-2004 Section 6.6.
5. Minimum grout pressure for installation and postgrout pressure for the anchor. The presumptive postgrout pressure of 300 psi may be used for all soil type.
6. Class I Corrosion Protection is required for all permanent anchors. The geotechnical report shall specify the corrosion protection recommendations for temporary anchors.
7. Performance test for the anchors shall be at a minimum of two (2) times the design loads and shall not exceed 80 percent of the specified minimum tensile strength of the anchor rod. A creep test is required for all prestressed anchors that are performance tested. All production anchors shall be tested at 150 percent of design loads and shall not be greater than 70 percent of the specified minimum tensile strength of the anchor rod.
8. Earth pressure, surcharge pressure and the seismic increment of earth pressure loading, when applicable.
9. Maximum recommended lateral deformation at the top of the soldier pile, at the tie-back anchor locations and the drilled pier concrete shafts at the lowest grade level.
10. Allowable vertical soil bearing pressure, friction resistance and lateral passive soil resistance for the drilled pier concrete shafts and associated factors of safety for these allowable capacities.
11. Soil-pier shaft/pile interaction assumptions and lateral soil stiffness to be used in design for drilled pier concrete shaft or pile lateral loads.
12. Acceptable drilling methods.
13. Geotechnical observation and monitoring recommendations.

J106.2.4.2 Structural requirements:

1. Tendons shall be thread-bar anchors conforming to ASTM A 722.

2. Anchor design loads shall be based upon the load combinations in Section 1605A.3.1 and shall not exceed 60 percent of the specified minimum tensile strength of the tendons.
3. The anchor shall be designed to fail in grout bond to the soil or rock before pullout of the soil wedge.
4. Design of shoring system shall account for as-built locations of soil anchors considering all specified construction tolerances in Section J106.2.8.
5. Design of shoring system shall account for both short and long term deformation.

J106.2.4.3 Testing of tie-back anchors:

1. The geotechnical engineer shall keep a record at job site of all test loads and total anchor movement, and report their accuracy.
2. If a tie-back anchor initially fails the testing requirements, the anchor shall be permitted to be regouted and retested. If anchor continues to fail, the followings steps shall be taken:
 - a. The contractor shall determine the cause of failure – variations of the soil conditions, installation methods, materials, etc.
 - b. Contractor shall propose a solution to remedy the problem. The proposed solution will need to be reviewed and approved by the geotechnical engineer, shoring design engineer and building official.
3. After a satisfactory test, each anchor shall be locked off in accordance with Section 8.4 of PTI 2004.
4. The shoring design engineer shall specify design loads for each anchor.

J106.2.5 Construction. The construction procedure shall address the following:

1. Holes drilled for piles/tie-back anchors shall be done without detrimental loss of ground, sloughing or caving of materials and without endangering previously installed shoring members or existing foundations.
2. Drilling of earth anchor shafts for tie-backs shall occur when the drill bench reaches two to three feet below the level of the tie-back pockets.
3. Casing or other methods shall be used where necessary to prevent loss of ground and collapse of the hole.
4. The drill cuttings from earth anchor shaft shall be removed prior to anchor installation.
5. Unless tremie methods are used, all water and loose materials shall be removed from the holes prior to installing piles/tie-backs.
6. Tie-back anchor rods with attached centralizing devices shall be installed into the shaft or through the drill casing. Centralizing device shall not restrict movement of the grout.

7. After lagging installation, voids between lagging and soil shall be backfilled immediately to the full height of lagging.
 8. The soldier piles shall be placed within specified tolerances in the drilled hole and braced against displacement during grouting. Fill shafts with concrete up to top of footing elevation, rest of the shaft can generally be filled with lean concrete. Excavation for lagging shall not be started until concrete has achieved sufficient strength for all anticipated loads as determined by the shoring design engineer.
 9. Where boulders and/or cobbles have been identified in the geotechnical reports, contractor shall be prepared to address boulders and/or cobbles that may be encountered during the drilling of soldier piles and tie-back anchors.
 10. The grouting equipment shall produce grout free of lumps and indispensed cement. The grouting equipment shall be sized to enable the grout to be pumped in continuous operation. The mixer shall be capable of continuously agitating the grout.
 11. The quantity of grout and grout pressure shall be recorded. The grout pressure shall be controlled to prevent excessive heave in soils or fracturing rock formations.
 12. If postgrouting is required, postgrouting operation shall be performed after initial grout has set for 24-hours in the bond length only. Tie-backs shall be grouted over a sufficient length (anchor bond length) to transfer the maximum anchor force to the anchor grout.
 13. Testing of anchors may be performed after postgrouting operations provided grout has reached strength of 3,000 psi as required by PTI-2004 Section 6.11.
 14. Anchor rods shall be tensioned straight and true. Excavation directly below the anchors shall not continue before those anchors are tested.
- J106.2.6 Inspection, survey monitoring and observation.**
1. The shoring design engineer or his designee shall make periodic inspections of the job site for the purpose of observing the installation of shoring system, testing of tie-back anchors and monitoring of survey.
 - a. Sampling and testing of concrete in soldier pile and tie-back anchor shafts
 - b. Fabrication of tie-back anchor pockets on soldier beams
 - c. Installation and testing of tie-back anchors
 - d. Survey monitoring of soldier pile and tie-back load cells
 - e. Survey monitoring of existing buildings
 3. A complete and accurate record of all soldier pile locations, depths, concrete strengths, tie-back locations and lengths, tie-back grout strength, quantity of concrete per pile, quantity of grout per tie-back and applied tie-back loads shall be maintained by the special inspector and geotechnical engineer. The shoring design engineer shall be notified of any unusual conditions encountered during installation.
 4. Calibration data for each test jack, pressure gauge and master pressure gauge shall be verified by the special inspector and geotechnical engineer. The calibration tests shall be performed by an independent testing laboratory and within 120 calendar days of the data submitted.
 5. Monitoring points shall be established at the top and at the anchor heads of selected soldier piles and at intermediate intervals as considered appropriate by the geotechnical engineer.
 6. Control points shall be established outside the area of influence of the shoring system to ensure the accuracy of the monitoring readings.
 7. The periodic basis of shoring monitoring, as a minimum, shall be as follows:
 - a. Initial monitoring shall be performed prior to any excavation.
 - b. Once excavation has begun, the periodic readings shall be taken weekly until excavation reaches the estimated subgrade elevation and the permanent foundation is complete.
 - c. If performance of the shoring is within established guidelines, shoring design engineer may permit the periodic readings to be bi-weekly. Once initiated, bi-weekly readings shall continue until the building slab at ground floor level is completed and capable of transmitting lateral loads to the permanent structure. Thereafter, readings can be monthly.
 - d. Where the building has been designed to resist lateral earth pressures, the periodic monitoring of the soldier piles and adjacent structure can be discontinued once the ground floor diaphragm and subterranean portion of the structure is capable of resisting lateral soil loads and approved by the shoring design engineer, geotechnical engineer and building official.
 - e. Additional readings shall be taken when requested by the special inspector, shoring design engineer, geotechnical engineer or building official.

8. Monitoring reading shall be submitted to the shoring design engineer, engineer in responsible charge, and the building official within three working days after they are conducted. Monitoring readings shall be accurate to within 0.01 feet. Results are to be submitted in tabular form showing at least the initial date of monitoring and reading, current monitoring date and reading and difference between the two readings.
9. If the total cumulative horizontal or vertical movement (from start of construction) of the existing buildings reaches $\frac{1}{2}$ inch or soldier piles reaches 1 inch all excavation activities shall be suspended. The geotechnical and shoring design engineer shall determine the cause of movement, if any, and recommend corrective measures, if necessary, before excavation continues.
10. If the total cumulative horizontal or vertical movement (from start of construction) of the existing buildings reaches $\frac{3}{4}$ inch or soldier piles reaches $1\frac{1}{2}$ inches all excavation activities shall be suspended until the causes, if any, can be determined. Supplemental shoring shall be devised to eliminate further movement and the building official shall review and approve the supplemental shoring before excavation continues.
11. Monitoring of tie-back anchor loads:
 - a. Load cells shall be installed at the tie-back heads adjacent to buildings at maximum interval of 50 feet, with a minimum of one load cells per wall.
 - b. Load cell readings shall be taken once a day during excavation and once a week during the remainder of construction.
 - c. Load cell readings shall be submitted to the geotechnical engineer, shoring design engineer, engineer in responsible charge and the building official.
 - d. Load cell readings can be terminated once the temporary shoring no longer provides support for the buildings.
4. If excessive movement or visible cracking occurs, contractor shall stop work and shore/reinforce excavation and contact shoring design engineer and the building official.
5. Monitoring of the existing structure shall be at reasonable intervals as required by the registered design professional subject to approval of the building official. Monitoring shall be performed by a licensed surveyor and shall consist of vertical and lateral movement of the existing structures. Prior to starting shoring installation a preconstruction meeting shall take place between the contractor, shoring design engineer, surveyor, geotechnical engineer and the building official to identify monitoring locations on existing buildings.
6. If in the opinion of the building official or shoring design engineer, monitoring data indicate excessive movement or other distress, all excavation shall cease until the geotechnical engineer and shoring design engineer investigates the situation and makes recommendations for remediation or continuing.
7. All reading and measurements shall be submitted to the building official and shoring design engineer.

J106.2.8 Tolerances. Following tolerances shall be specified on the construction documents.

1. Soldier piles:
 - i. Horizontal and vertical construction tolerances for the soldier pile locations.
 - ii. Soldier pile plumbness requirements (angle with vertical line).
2. Tie-back anchors:
 - i. Allowable deviation of anchor projected angle from specified vertical and horizontal design projected angle.
 - ii. Anchor clearance to the existing/new utilities and structures.

SECTION J107 FILLS

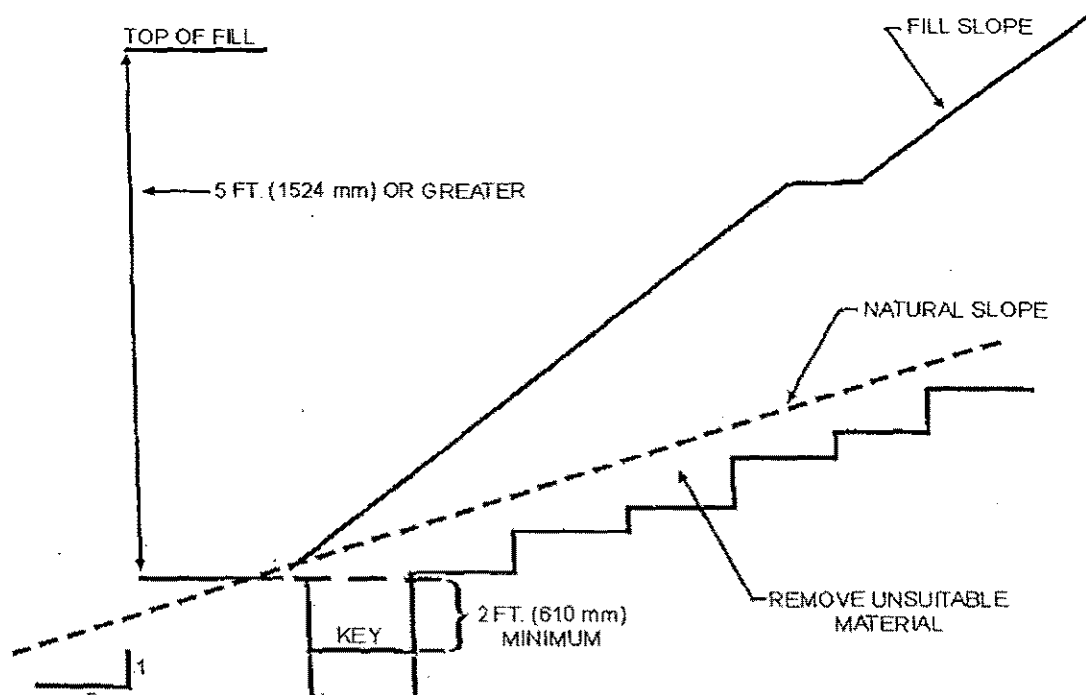
J106.2.7 Monitoring of existing OSHPD 1 and 4 structures.

1. The contractor shall complete a written and photographic log of all existing OSHPD 1 and 4 structures within 100 feet or three times depth of shoring, prior to construction. A licensed surveyor shall document all existing substantial cracks in adjacent existing structures.
2. Contractor shall document existing condition of wall cracks adjacent to shoring walls prior to start of construction.
3. Contractor shall monitor existing walls for movement or cracking that may result from adjacent shoring.

J107.1 General. Unless otherwise recommended in the geotechnical report, fills shall comply with the provisions of this section.

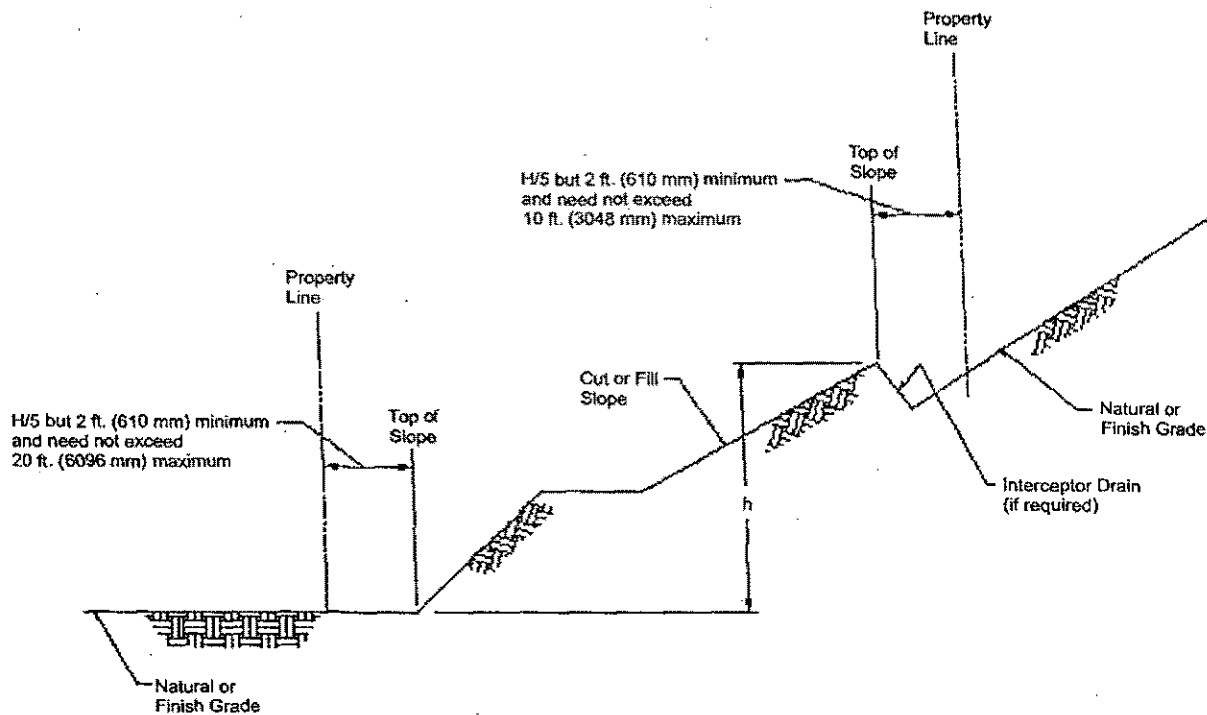
J107.2 Surface preparation. The ground surface shall be prepared to receive fill by removing vegetation, topsoil and other unsuitable materials, and scarifying the ground to provide a bond with the fill material.

J107.3 Benching. Where existing grade is at a slope steeper than five units horizontal to one unit vertical (20-percent slope) and the depth of the fill exceeds 5 feet (1524 mm) benching shall be provided in accordance with Figure J107.3. A key shall be provided which is at least 10 feet (3048 mm) in width and 2 feet (610 mm) in depth.



For SI: 1 foot = 304.8 mm.

FIGURE J107.3
BENCHING DETAILS



For SI: 1 foot = 304.8 mm.

FIGURE J108.1
DRAINAGE DIMENSIONS

J107.4 Fill material. Fill material shall not include organic, frozen or other deleterious materials. No rock or similar irreducible material greater than 12 inches (305 mm) in any dimension shall be included in fills.

J107.5 Compaction. All fill material shall be compacted to 90 percent of maximum density as determined by ASTM D 1557, Modified Proctor, in lifts not exceeding 12 inches (305 mm) in depth.

|| **[DSA-SS, DSA-SS/CC & OSHPD 1, 2 & 4]** This section establishes minimum requirements only.

J107.6 Maximum slope. The slope of fill surfaces shall be no steeper than is safe for the intended use. Fill slopes steeper than two units horizontal to one unit vertical (50-percent slope) shall be justified by a geotechnical report or engineering data.

SECTION J108 SETBACKS

J108.1 General. Cut and fill slopes shall be set back from the property lines in accordance with this section. Setback dimensions shall be measured perpendicular to the property line and shall be as shown in Figure J108.1, unless substantiating data is submitted justifying reduced setbacks.

J108.2 Top of slope. The setback at the top of a cut slope shall not be less than that shown in Figure J108.1, or than is required to accommodate any required interceptor drains, whichever is greater.

J108.3 Slope protection. Where required to protect adjacent properties at the toe of a slope from adverse effects of the grading, additional protection, approved by the *building official*, shall be included. Such protection may include but shall not be limited to:

1. Setbacks greater than those required by Figure J108.1.
2. Provisions for retaining walls or similar construction.
3. Erosion protection of the fill slopes.
4. Provision for the control of surface waters.

SECTION J109 DRAINAGE AND TERRACING

J109.1 General. Unless otherwise recommended by a *registered design professional*, drainage facilities and terracing shall be provided in accordance with the requirements of this section.

Exception: Drainage facilities and terracing need not be provided where the ground slope is not steeper than 3 horizontal to 1 vertical (33 percent).

J109.2 Terraces. Terraces at least 6 feet (1829 mm) in width shall be established at not more than 30-foot (9144 mm) vertical intervals on all cut or fill slopes to control surface drainage and debris. Suitable access shall be provided to allow for cleaning and maintenance.

Where more than two terraces are required, one terrace, located at approximately mid-height, shall be at least 12 feet (3658 mm) in width.

Swales or ditches shall be provided on terraces. They shall have a minimum gradient of 20 horizontal to 1 vertical (5 percent) and shall be paved with concrete not less than 3 inches (76 mm) in thickness, or with other materials suitable to the application. They shall have a minimum depth of 12 inches (305 mm) and a minimum width of 5 feet (1524 mm).

A single run of swale or ditch shall not collect runoff from a tributary area exceeding 13,500 square feet (1256 m²) (projected) without discharging into a down drain.

J109.3 Interceptor drains. Interceptor drains shall be installed along the top of cut slopes receiving drainage from a tributary width greater than 40 feet (12 192 mm), measured horizontally. They shall have a minimum depth of 1 foot (305 mm) and a minimum width of 3 feet (915 mm). The slope shall be approved by the *building official*, but shall not be less than 50 horizontal to 1 vertical (2 percent). The drain shall be paved with concrete not less than 3 inches (76 mm) in thickness, or by other materials suitable to the application. Discharge from the drain shall be accomplished in a manner to prevent erosion and shall be approved by the building official.

J109.4 Drainage across property lines. Drainage across property lines shall not exceed that which existed prior to grading. Excess or concentrated drainage shall be contained on site or directed to an approved drainage facility. Erosion of the ground in the area of discharge shall be prevented by installation of nonerosive down drains or other devices.

SECTION J110 EROSION CONTROL

J110.1 General. The faces of cut and fill slopes shall be prepared and maintained to control erosion. This control shall be permitted to consist of effective planting.

Exception: Erosion control measures need not be provided on cut slopes not subject to erosion due to the erosion-resistant character of the materials.

Erosion control for the slopes shall be installed as soon as practicable and prior to calling for final inspection.

J110.2 Other devices. Where necessary, check dams, cribbing, riprap or other devices or methods shall be employed to control erosion and provide safety.

SECTION J111 REFERENCED STANDARDS

ASTM D
1557-e01

Test Method for Laboratory
Compaction Characteristics
of Soil Using Modified Effort
[56,000 ft-lb/ft³ (2,700kN-m/m³)].

J107.6

APPENDIX Q "CALIFORNIA FIRE CODE CHAPTERS 5 AND 14"

Q

(Refer to the Fire Department for the latest version.)

CHAPTER 5

FIRE SERVICE FEATURES

SECTION 501 GENERAL

501.1 Scope. Fire service features for buildings, structures and premises shall comply with this chapter.

501.2 Permits. A permit shall be required as set forth in Sections 105.6 and 105.7.

501.3 Construction documents. *Construction documents* for proposed fire apparatus access, location of *fire lanes*, security gates across fire apparatus access and *construction documents* and hydraulic calculations for fire hydrant systems shall be submitted to the fire department for review and approval prior to construction.

501.4 Timing of installation. When fire apparatus access roads or a water supply for fire protection is required to be installed, such protection shall be installed and made serviceable prior to and during the time of construction except when *approved* alternative methods of protection are provided. Temporary street signs shall be installed at each street intersection when construction of new roadways allows passage by vehicles in accordance with Section 505.2.

SECTION 502 DEFINITIONS

502.1 Definitions. The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

FIRE APPARATUS ACCESS ROAD. A road that provides fire apparatus access from a fire station to a facility, building or portion thereof. This is a general term inclusive of all other terms such as *fire lane*, public street, private street, parking lot lane and access roadway.

FIRE COMMAND CENTER. The principal attended or unattended location where the status of the detection, alarm communications and control systems is displayed, and from which the system(s) can be manually controlled.

FIRE DEPARTMENT MASTER KEY. A limited issue key of special or controlled design to be carried by fire department officials in command which will open key boxes on specified properties.

FIRE LANE. A road or other passageway developed to allow the passage of fire apparatus. A fire lane is not necessarily intended for vehicular traffic other than fire apparatus.

KEY BOX. A secure device with a lock operable only by a fire department master key, and containing building entry keys and other keys that may be required for access in an emergency.

SECTION 503 FIRE APPARATUS ACCESS ROADS

503.1 Where required. Fire apparatus access roads shall be provided and maintained in accordance with Sections 503.1.1 through 503.1.3.

503.1.1 Buildings and facilities. *Approved* fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet (45 720 mm) of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an *approved* route around the exterior of the building or facility.

Exception: The *fire code official* is authorized to increase the dimension of 150 feet (45 720 mm) where:

1. The building is equipped throughout with an *approved automatic sprinkler system* installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3.
2. Fire apparatus access roads cannot be installed because of location on property, topography, waterways, nonnegotiable grades or other similar conditions, and an *approved* alternative means of fire protection is provided.
3. There are not more than two Group R-3 or Group U occupancies.

503.1.2 Additional access. The *fire code official* is authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access.

503.1.3 High-piled storage. Fire department vehicle access to buildings used for *high-piled combustible storage* shall comply with the applicable provisions of Chapter 23.

503.2 Specifications. Fire apparatus access roads shall be installed and arranged in accordance with Sections 503.2.1 through 503.2.8.

[California Code of Regulations, Title 19, Division 1, §3.05(a)] *Fire Department Access and Egress. (Roads)*

(a) *Roads.* Required access roads from every building to a public street shall be all-weather hard-surfaced (suitable for use by fire apparatus) right-of-way not less than 20 feet (6096 mm) in width. Such right-of-way shall be unobstructed and maintained only as access to the public street.

Exception: The enforcing agency may waive or modify this requirement if in his opinion such all-weather hard-surfaced condition is not necessary in the interest of public safety and welfare.

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), exclusive of shoulders, except for *approved* security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm).

503.2.2 Authority. The *fire code official* shall have the authority to require an increase in the minimum access widths where they are inadequate for fire or rescue operations.

503.2.3 Surface. Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be surfaced so as to provide all-weather driving capabilities.

503.2.4 Turning radius. The required turning radius of a fire apparatus access road shall be determined by the *fire code official*.

503.2.5 Dead ends. Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) in length shall be provided with an *approved* area for turning around fire apparatus.

503.2.6 Bridges and elevated surfaces. Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge shall be constructed and maintained in accordance with AASHTO HB-17. Bridges and elevated surfaces shall be designed for a live load sufficient to carry the imposed loads of fire apparatus. Vehicle load limits shall be posted at both entrances to bridges when required by the *fire code official*. Where elevated surfaces designed for emergency vehicle use are adjacent to surfaces which are not designed for such use, *approved* barriers, *approved* signs or both shall be installed and maintained when required by the *fire code official*.

503.2.7 Grade. The grade of the fire apparatus access road shall be within the limits established by the *fire code official* based on the fire department's apparatus.

503.2.8 Angles of approach and departure. The angles of approach and departure for fire apparatus access roads shall be within the limits established by the *fire code official* based on the fire department's apparatus.

503.3 Marking. Where required by the *fire code official*, *approved* signs or other *approved* notices or markings that include the words NO PARKING—FIRE LANE shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. The means by which *fire lanes* are designated shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility.

503.4 Obstruction of fire apparatus access roads. Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in Section 503.2.1 shall be maintained at all times.

503.5 Required gates or barricades. The *fire code official* is authorized to require the installation and maintenance of gates or other *approved* barricades across fire apparatus

access roads, trails or other accessways, not including public streets, alleys or highways. Electric gate operators, where provided, shall be *listed* in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F 2200.

503.5.1 Secured gates and barricades. When required, gates and barricades shall be secured in an *approved* manner. Roads, trails and other accessways that have been closed and obstructed in the manner prescribed by Section 503.5 shall not be trespassed on or used unless authorized by the owner and the *fire code official*.

Exception: The restriction on use shall not apply to public officers acting within the scope of duty.

503.5.2 Fences and gates. School grounds may be fenced and gates therein may be equipped with locks, provided that safe dispersal areas based on 3 square feet (0.28 m²) per occupant are located between the school and the fence. Such required safe dispersal areas shall not be located less than 50 feet (15 240 mm) from school buildings.

Every public and private school shall conform with Section 32020 of the Education Code, which states:

The governing board of every public school district, and the governing authority of every private school, which maintains any building used for the instruction or housing of school pupils on land entirely enclosed (except for building walls) by fences of walls, shall, through cooperation with the local law enforcement and fire-protection agencies having jurisdiction of the area, make provision for the erection of gates in such fences or walls. The gates shall be of sufficient size to permit the entrance of the ambulances, police equipment and fire-fighting apparatus used by the law enforcement and fire-protection agencies. There shall be no less than one such access gate and there shall be as many such gates as needed to assure access to all major buildings and ground areas. If such gates are to be equipped with locks, the locking devices shall be designed to permit ready entrance by the use of the chain or bolt-cutting devices with which the local law enforcement and fire-protection agencies may be equipped.

503.6 Security gates. The installation of security gates across a fire apparatus access road shall be *approved* by the fire chief. Where security gates are installed, they shall have an *approved* means of emergency operation. The security gates and the emergency operation shall be maintained operational at all times. Electric gate operators, where provided, shall be *listed* in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F 2200.

SECTION 504

ACCESS TO BUILDING OPENINGS AND ROOFS

504.1 Required access. Exterior doors and openings required by this code or the *California Building Code* shall be maintained readily accessible for emergency access by the fire

department. An *approved* access walkway leading from fire apparatus access roads to exterior openings shall be provided when required by the *fire code official*.

[California Code of Regulations, Title 19, Division 1, §3.05(b)] Fire Department Access and Egress. (Roofs)

(b) Roofs. No person shall install or maintain any security barrier such as barbed wire fencing, razor wire fencing, chain link fencing or any other fencing material, cable, aerial, antenna or other obstruction on the roof of any commercial establishment in such a manner as to obstruct or render egress or access hazardous in the event of fire or other emergency.

Exception: Guy wire, rods and aerial antenna masts may be attached to a roof structure having a slope of less than 30 degrees provided there is full clearance of seven feet or more between the roof and said obstruction. Guy wire or rods required to support aerial or antenna masts may be attached to a roof structure a lateral distance from the mast not in excess of one-sixth the height of the mast.

504.2 Maintenance of exterior doors and openings. Exterior doors and their function shall not be eliminated without prior approval. Exterior doors that have been rendered nonfunctional and that retain a functional door exterior appearance shall have a sign affixed to the exterior side of the door with the words THIS DOOR BLOCKED. The sign shall consist of letters having a principal stroke of not less than $\frac{3}{4}$ inch (19.1 mm) wide and at least 6 inches (152 mm) high on a contrasting background. Required fire department access doors shall not be obstructed or eliminated. *Exit* and *exit access* doors shall comply with Chapter 10. Access doors for *high-piled combustible storage* shall comply with Section 2306.6.1.

504.3 Stairway access to roof. New buildings four or more stories above grade plane, except those with a roof slope greater than four units vertical in 12 units horizontal (33.3-percent slope), shall be provided with a *stairway* to the roof. *Stairway* access to the roof shall be in accordance with Section 1009.13. Such *stairway* shall be marked at street and floor levels with a sign indicating that the *stairway* continues to the roof. Where roofs are used for roof gardens or for other purposes, *stairways* shall be provided as required for such occupancy classification.

SECTION 505 PREMISES IDENTIFICATION

505.1 Address identification. New and existing buildings shall have *approved* address numbers, building numbers or *approved* building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall be a minimum of 4 inches (101.6 mm) high with a minimum stroke width of 0.5 inch (12.7 mm). Where access is by means of a private road and the building cannot be viewed from the *public way*, a monument, pole or other sign or means shall be used to identify the structure.

505.2 Street or road signs. Streets and roads shall be identified with *approved* signs. Temporary signs shall be installed at each street intersection when construction of new roadways allows passage by vehicles. Signs shall be of an *approved* size, weather resistant and be maintained until replaced by permanent signs.

SECTION 506 KEY BOXES

506.1 Where required. Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life-saving or fire-fighting purposes, the *fire code official* is authorized to require a key box to be installed in an *approved* location. The key box shall be of an *approved* type and shall contain keys to gain necessary access as required by the *fire code official*.

506.1.1 Locks. An *approved* lock shall be installed on gates or similar barriers when required by the *fire code official*.

506.2 Key box maintenance. The operator of the building shall immediately notify the *fire code official* and provide the new key when a lock is changed or rekeyed. The key to such lock shall be secured in the key box.

SECTION 507 FIRE PROTECTION WATER SUPPLIES

507.1 Required water supply. An *approved* water supply capable of supplying the required fire flow for fire protection shall be provided to premises upon which facilities, buildings or portions of buildings are hereafter constructed or moved into or within the jurisdiction.

507.2 Type of water supply. A water supply shall consist of reservoirs, pressure tanks, elevated tanks, water mains or other fixed systems capable of providing the required fire flow.

507.2.1 Private fire service mains. Private fire service mains and appurtenances shall be installed in accordance with NFPA 24 as amended in Chapter 47.

507.2.2 Water tanks. Water tanks for private fire protection shall be installed in accordance with NFPA 22.

507.3 Fire flow. Fire flow requirements for buildings or portions of buildings and facilities shall be determined by an *approved* method or Appendix B.

507.4 Water supply test. The *fire code official* shall be notified prior to the water supply test. Water supply tests shall be witnessed by the *fire code official* or *approved* documentation of the test shall be provided to the *fire code official* prior to final approval of the water supply system.

507.5 Fire hydrant systems. Fire hydrant systems shall comply with Sections 507.5.1 through 507.5.6 and Appendix C or by an *approved* method.

507.5.1 Where required. Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 400 feet (122 m) from a hydrant on

a fire apparatus access road, as measured by an *approved* route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the *fire code official*.

Exception: For Group R-3 and Group U occupancies, *equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3*, the distance requirement shall be *not more than 600 feet (183 m)*.

507.5.2 Inspection, testing and maintenance. Fire hydrant systems shall be subject to periodic tests as required by the *fire code official*. Fire hydrant systems shall be maintained in an operative condition at all times and shall be repaired where defective. Additions, repairs, *alterations* and servicing shall comply with *approved standards*.

507.5.3 Private fire service mains and water tanks. Private fire service mains and water tanks shall be periodically inspected, tested and maintained in accordance with *California Code of Regulations, Title 19, Division 1, Chapter 5*.

507.5.4 Obstruction. Unobstructed access to fire hydrants shall be maintained at all times. The fire department shall not be deterred or hindered from gaining immediate access to fire protection equipment or fire hydrants.

507.5.5 Clear space around hydrants. A 3-foot (914 mm) clear space shall be maintained around the circumference of fire hydrants except as otherwise required or *approved*.

507.5.6 Physical protection. Where fire hydrants are subject to impact by a motor vehicle, guard posts or other *approved means* shall comply with Section 312.

SECTION 508 FIRE COMMAND CENTER

508.1 General. Where required by other sections of this code and in all buildings classified as high-rise buildings by the *California Building Code and Group 1-2 occupancies having occupied floors located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access*, a fire command center for fire department operations shall be provided and shall comply with Sections 508.1.1 through 508.1.5.

508.1.1 Location and access. The location and accessibility of the *fire command center* shall be *approved* by the fire chief.

508.1.2 Separation. The *fire command center* shall be separated from the remainder of the building by not less than a 1-hour *fire barrier* constructed in accordance with Section 707 of the *California Building Code* or *horizontal assembly* constructed in accordance with Section 712 of the *California Building Code*, or both.

508.1.3 Size. The *fire command center* shall be a minimum of 200 square feet (19 m²) in area with a minimum dimension of 10 feet (3048 mm).

508.1.4 Layout approval. A layout of the *fire command center* and all features required by this section to be contained therein shall be submitted for approval prior to installation.

508.1.5 Required features. The *fire command center* shall comply with NFPA 72 and shall contain the following features:

1. The emergency voice/alarm communication system control unit.
2. The fire department communications system.
3. Fire detection and alarm system annunciator.
4. Annunciator unit visually indicating the location of the elevators and whether they are operational.
5. Status indicators and controls for air distribution systems.
6. The fire-fighter's control panel required by Section 909.16 for smoke control systems installed in the building.
7. Controls for unlocking *stairway* doors simultaneously.
8. Sprinkler valve and water-flow detector display panels.
9. Emergency and standby power status indicators.
10. A telephone for fire department use with controlled access to the public telephone system.
11. Fire pump status indicators.
12. Schematic building plans indicating the typical floor plan and detailing the building core, *means of egress, fire protection systems, fire-fighting equipment* and fire department access, and the location of *fire walls, fire barriers, fire partitions, smoke barriers* and smoke partitions.
13. Work table.
14. Generator supervision devices, manual start and transfer features.
15. Public address system, where specifically required by other sections of this code.
16. Elevator fire recall switch in accordance with *California Code of Regulations, Title 8, Division 1, Chapter 4, Subchapter 6, Elevator Safety Orders*.
17. Elevator emergency or standby power selector switch(es), where emergency or standby power is provided.

Fire Command Centers shall not be used for the housing of any boiler, heating unit, generator, combustible storage, or similar hazardous equipment or storage.

SECTION 509 FIRE PROTECTION EQUIPMENT IDENTIFICATION AND ACCESS

509.1 Identification. Fire protection equipment shall be identified in an *approved* manner. Rooms containing controls for air-conditioning systems, sprinkler risers and valves, or other fire detection, suppression or control elements shall be identified for the use of the fire department. *Approved* signs required to identify fire protection equipment and equipment location

shall be constructed of durable materials, permanently installed and readily visible.

509.2 Equipment access. *Approved* access shall be provided and maintained for all fire protection equipment to permit immediate safe operation and maintenance of such equipment. Storage, trash and other materials or objects shall not be placed or kept in such a manner that would prevent such equipment from being readily accessible.

SECTION 510 EMERGENCY RESPONDER RADIO COVERAGE

510.1 Emergency responder radio coverage in buildings. All buildings shall have *approved* radio coverage for emergency responders within the building based upon the existing coverage levels of the public safety communication systems of the jurisdiction at the exterior of the building. This section shall not require improvement of the existing public safety communication systems.

Exceptions:

1. Where *approved* by the building official and the *fire code official*, a wired communication system in accordance with Section 907.2.13.2 shall be permitted to be installed or maintained in lieu of an *approved* radio coverage system.
2. Where it is determined by the *fire code official* that the radio coverage system is not needed.

510.2 Radio signal strength. The building shall be considered to have acceptable emergency responder radio coverage when signal strength measurements in 95 percent of all areas on each floor of the building meet the signal strength requirements of Sections 510.2.1 and 510.2.2.

510.2.1 Minimum signal strength into the building. A minimum signal strength of -95 dBm shall be receivable within the building.

510.2.2 Minimum signal strength out of the building. A minimum signal strength of -100 dBm shall be received by the agency's radio system when transmitted from within the building.

510.3 Emergency responder radio coverage in existing buildings. Existing buildings that do not have approved radio coverage for emergency responders within the building shall be equipped with such coverage according to one of the following:

1. Wherever existing wired communication system cannot be repaired or is being replaced, or where not *approved* in accordance with Section 510.1, Exception 1.
2. Within a time frame established by the adopting authority.

CHAPTER 14

FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION

SECTION 1401 GENERAL

1401.1 Scope. This chapter shall apply to structures in the course of construction, *alteration* or demolition, including those in underground locations. Compliance with NFPA 241 is required for items not specifically addressed herein.

1401.2 Purpose. This chapter prescribes minimum safeguards for construction, *alteration* and demolition operations to provide reasonable safety to life and property from fire during such operations.

SECTION 1402 DEFINITIONS

1402.1 Terms defined in Chapter 2. Words and terms used in this chapter and defined in Chapter 2 shall have the meanings ascribed to them as defined therein.

SECTION 1403 TEMPORARY HEATING EQUIPMENT

1403.1 Listed. Temporary heating devices shall be *listed* and *labeled* in accordance with the *California Mechanical Code*. Installation, maintenance and use of temporary heating devices shall be in accordance with the terms of the listing.

1403.2 Oil-fired heaters. Oil-fired heaters shall comply with Section 603.

1403.3 LP-gas heaters. Fuel supplies for liquefied-petroleum gas-fired heaters shall comply with Chapter 38 and the *California Mechanical Code*.

1403.4 Refueling. Refueling operations for liquid-fueled equipment or appliances shall be conducted in accordance with Section 3405. The equipment or appliance shall be allowed to cool prior to refueling.

1403.5 Installation. Clearance to combustibles from temporary heating devices shall be maintained in accordance with the *labeled* equipment. When in operation, temporary heating devices shall be fixed in place and protected from damage, dislodgement or overturning in accordance with the manufacturer's instructions.

1403.6 Supervision. The use of temporary heating devices shall be supervised and maintained only by competent personnel.

SECTION 1404 PRECAUTIONS AGAINST FIRE

1404.1 Smoking. Smoking shall be prohibited except in *approved* areas. Signs shall be posted in accordance with Section 310. In *approved* areas where smoking is permitted, *approved* ashtrays shall be provided in accordance with Section 310.

1404.2 Waste disposal. Combustible debris shall not be accumulated within buildings. Combustible debris, rubbish and waste material shall be removed from buildings at the end of each shift of work. Combustible debris, rubbish and waste material shall not be disposed of by burning on the site unless *approved*.

1404.3 Open burning. *Open burning* shall comply with Section 307.

1404.4 Spontaneous ignition. Materials susceptible to spontaneous ignition, such as oily rags, shall be stored in a *listed* disposal container.

1404.5 Fire watch. When required by the *fire code official* for building demolition that is hazardous in nature, qualified personnel shall be provided to serve as an on-site fire watch. Fire watch personnel shall be provided with at least one *approved* means for notification of the fire department and their sole duty shall be to perform constant patrols and watch for the occurrence of fire.

1404.6 Cutting and welding. Operations involving the use of cutting and welding shall be done in accordance with Chapter 26.

1404.7 Electrical. Temporary wiring for electrical power and lighting installations used in connection with the construction, *alteration* or demolition of buildings, structures, equipment or similar activities shall comply with the *California Electrical Code*.

SECTION 1405 FLAMMABLE AND COMBUSTIBLE LIQUIDS

1405.1 Storage of flammable and combustible liquids. Storage of flammable and *combustible liquids* shall be in accordance with Section 3404.

1405.2 Class I and Class II liquids. The storage, use and handling of flammable and *combustible liquids* at construction sites shall be in accordance with Section 3406.2. Ventilation shall be provided for operations involving the application of materials containing flammable solvents.

1405.3 Housekeeping. Flammable and combustible liquid storage areas shall be maintained clear of combustible vegeta-

tion and waste materials. Such storage areas shall not be used for the storage of combustible materials.

1405.4 Precautions against fire. Sources of ignition and smoking shall be prohibited in flammable and *combustible liquid* storage areas. Signs shall be posted in accordance with Section 310.

1405.5 Handling at point of final use. Class I and II liquids shall be kept in *approved* safety containers.

1405.6 Leakage and spills. Leaking vessels shall be immediately repaired or taken out of service and spills shall be cleaned up and disposed of properly.

SECTION 1406 FLAMMABLE GASES

1406.1 Storage and handling. The storage, use and handling of flammable gases shall comply with Chapter 35.

SECTION 1407 EXPLOSIVE MATERIALS

1407.1 Storage and handling. *Explosive* materials shall be stored, used and handled in accordance with Chapter 33.

1407.2 Supervision. Blasting operations shall be conducted in accordance with Chapter 33.

1407.3 Demolition using explosives. *Approved* fire hoses for use by demolition personnel shall be maintained at the demolition site whenever *explosives* are used for demolition. Such fire hoses shall be connected to an *approved* water supply and shall be capable of being brought to bear on post-*detonation* fires anywhere on the site of the demolition operation.

SECTION 1408 OWNER'S RESPONSIBILITY FOR FIRE PROTECTION

1408.1 Program superintendent. The *owner* shall designate a *person* to be the fire prevention program superintendent who shall be responsible for the fire prevention program and ensure that it is carried out through completion of the project. The fire prevention program superintendent shall have the authority to enforce the provisions of this chapter and other provisions as necessary to secure the intent of this chapter. Where guard service is provided, the superintendent shall be responsible for the guard service.

1408.2 Prefire plans. The fire prevention program superintendent shall develop and maintain an *approved* prefire plan in cooperation with the fire chief. The fire chief and the *fire code official* shall be notified of changes affecting the utilization of information contained in such prefire plans.

1408.3 Training. Training of responsible personnel in the use of fire protection equipment shall be the responsibility of the fire prevention program superintendent.

1408.4 Fire protection devices. The fire prevention program superintendent shall determine that all fire protection equipment is maintained and serviced in accordance with this code.

The quantity and type of fire protection equipment shall be *approved*.

1408.5 Hot work operations. The fire prevention program superintendent shall be responsible for supervising the permit system for hot work operations in accordance with Chapter 26.

1408.6 Impairment of fire protection systems. Impairments to any *fire protection system* shall be in accordance with Section 901.

1408.7 Temporary covering of fire protection devices. Coverings placed on or over fire protection devices to protect them from damage during construction processes shall be immediately removed upon the completion of the construction processes in the room or area in which the devices are installed.

SECTION 1409 FIRE REPORTING

1409.1 Emergency telephone. Readily accessible emergency telephone facilities shall be provided in an *approved* location at the construction site. The street address of the construction site and the emergency telephone number of the fire department shall be posted adjacent to the telephone.

SECTION 1410 ACCESS FOR FIRE FIGHTING

1410.1 Required access. *Approved* vehicle access for fire fighting shall be provided to all construction or demolition sites. Vehicle access shall be provided to within 100 feet (30 480 mm) of temporary or permanent fire department connections. Vehicle access shall be provided by either temporary or permanent roads, capable of supporting vehicle loading under all weather conditions. Vehicle access shall be maintained until permanent fire apparatus access roads are available.

1410.2 Key boxes. Key boxes shall be provided as required by Chapter 5.

SECTION 1411 MEANS OF EGRESS

[B] 1411.1 Stairways required. Where a building has been constructed to a *building height* of 50 feet (15 240 mm) or four stories, or where an existing building exceeding 50 feet (15 240 mm) in *building height* is altered, at least one temporary lighted *stairway* shall be provided unless one or more of the permanent *stairways* are erected as the construction progresses.

1411.2 Maintenance. Required *means of egress* shall be maintained during construction and demolition, remodeling or *alterations* and additions to any building.

Exception: *Approved* temporary *means of egress* systems and facilities.

SECTION 1412 WATER SUPPLY FOR FIRE PROTECTION

1412.1 When required. An *approved* water supply for fire protection, either temporary or permanent, shall be made available as soon as combustible material arrives on the site.

SECTION 1413 STANDPIPES

1413.1 Where required. In buildings required to have standpipes by Section 905.3.1, not less than one standpipe shall be provided for use during construction. Such standpipes shall be installed when the progress of construction is not more than 40 feet (12 192 mm) in height above the lowest level of fire department vehicle access. Such standpipe shall be provided with fire department hose connections at accessible locations adjacent to usable stairs. Such standpipes shall be extended as construction progresses to within one floor of the highest point of construction having secured decking or flooring.

1413.2 Buildings being demolished. Where a building is being demolished and a standpipe is existing within such a building, such standpipe shall be maintained in an operable condition so as to be available for use by the fire department. Such standpipe shall be demolished with the building but shall not be demolished more than one floor below the floor being demolished.

1413.3 Detailed requirements. Standpipes shall be installed in accordance with the provisions of Section 905.

Exception: Standpipes shall be either temporary or permanent in nature, and with or without a water supply, provided that such standpipes comply with the requirements of Section 905 as to capacity, outlets and materials.

SECTION 1414 AUTOMATIC SPRINKLER SYSTEM

1414.1 Completion before occupancy. In buildings where an *automatic sprinkler system* is required by this code or the *California Building Code*, it shall be unlawful to occupy any portion of a building or structure until the *automatic sprinkler system* installation has been tested and *approved*, except as provided in Section 105.3.4.

1414.2 Operation of valves. Operation of sprinkler control valves shall be allowed only by properly authorized personnel and shall be accompanied by notification of duly designated parties. When the sprinkler protection is being regularly turned off and on to facilitate connection of newly completed seg-

ments, the sprinkler control valves shall be checked at the end of each work period to ascertain that protection is in service.

SECTION 1415 PORTABLE FIRE EXTINGUISHERS

1415.1 Where required. Structures under construction, *alteration* or demolition shall be provided with not less than one *approved* portable fire extinguisher in accordance with Section 906 and sized for not less than ordinary hazard as follows:

1. At each *stairway* on all floor levels where combustible materials have accumulated.
2. In every storage and construction shed.
3. Additional portable fire extinguishers shall be provided where special hazards exist including, but not limited to, the storage and use of flammable and *combustible liquids*.

SECTION 1416 MOTORIZED EQUIPMENT

1416.1 Conditions of use. Internal-combustion-powered construction equipment shall be used in accordance with all of the following conditions:

1. Equipment shall be located so that exhausts do not discharge against combustible material.
2. Exhausts shall be piped to the outside of the building.
3. Equipment shall not be refueled while in operation.
4. Fuel for equipment shall be stored in an *approved* area outside of the building.

SECTION 1417 SAFEGUARDING ROOFING OPERATIONS

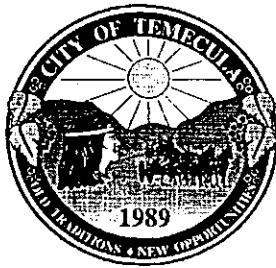
1417.1 General. Roofing operations utilizing heat-producing systems or other ignition sources shall be conducted in accordance with Sections 1417.2 and 1417.3 and Chapter 26.

1417.2 Asphalt and tar kettles. Asphalt and tar kettles shall be operated in accordance with Section 303.

1417.3 Fire extinguishers for roofing operations. Fire extinguishers shall comply with Section 906. There shall be not less than one multipurpose portable fire extinguisher with a minimum 3-A 40-B:C rating on the roof being covered or repaired.

**APPENDIX R "OBTAINING PW INSPECTOR'S CLEARANCE TO ALLOW ISSUANCE
OF A BUILDING PERMIT"**

R



OBTAINING PUBLIC WORKS INSPECTOR'S CLEARANCE TO ALLOW ISSUANCE OF A BUILDING PERMIT

These instructions should be used as guidelines to obtain building permit clearances from Public Works inspectors.

Instructions:

1. Completion of Grading. The grading, as shown on the approved grading plan, must be 100% complete and the site must be ready for inspection.
2. Scheduling an Inspection. Public Works (PW) inspections shall be scheduled by calling the **PW Inspection Line at (951) 308-6395**. Verbal inspection requests made directly to the PW Inspector may not be accommodated.
 - (a) Inspections must be requested no later than 3:30 pm the day prior to the requested date of inspection (i.e., an inspection for Thursday must be called in no later than Wednesday at 3:30 pm).
 - (b) More than 1 inspection may be requested per call, but they must be **specific** and all relevant information provided.
3. Submittal of Required Items. The following items shall be presented to the PW Inspector, upon arrival for the scheduled inspection:
 - (a) the pad elevation certification (i.e., rough grade cert) and
 - (b) the pad compaction certification/report (i.e., final geotechnical/soils report).
4. Inspection Clearance. After the inspection, if the PW Inspector finds the work...
 - (a) acceptable, the PW inspector's clearance of the project site will be granted. Prior to proceeding to City Hall to obtain the building permit, it is highly recommended that the Community Development Technician be contacted to confirm all other outstanding department clearances. Please allow a **reasonable time** for City staff to process all departments' clearances;
or
 - (b) unacceptable, the PW inspector will identify field deficiencies and the project site will not be cleared. All deficiencies must be addressed prior to requesting/scheduling a follow-up inspection.

APPENDIX S "STANDARD PAD CERTIFICATION LETTER"

S

[[Date of Letter]]

City of Temecula
Public Works Department
41000 Main Street
Temecula, CA 92589

Subject: **Final Grade Certification**
Lot / Parcel [[Lot #]] **of Tract / Parcel Map** [[Map #]]
~~LDXX-XXX~~GR

Attn: **[[Inspector's Name]]**
[[Inspector's Title]]

I hereby certify that the pad elevation for the property located at **[[property address]]** is **[[elevation #]]** which complies with the pad elevation shown on the **approved** precise grading plan for Lot / Parcel **[[Lot #]]** of Tract / Parcel Map **[[Map #]]**.

I also hereby certify that the building set back distances, locations and elevations of the drainage facilities, surface drainage elevations, and Water Quality Management Plan (WQMP) provisions and improvements in the field correspond and comply with those shown on the **approved** precise grading plan and WQMP document for Lot / Parcel **[[Lot #]]** of Tract / Parcel Map **[[Map #]]**.

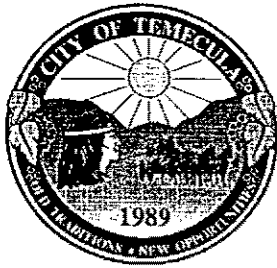
I also hereby certify that the slopes in the field were constructed in accordance and comply with the **approved** precise grading plan for Lot / Parcel **[[Lot #]]** of Tract / Parcel Map **[[Map #]]**.

[[Engineer's / Company Name]]
[[R.C.E. Number]]

[[Stamp with Signature]]

**APPENDIX T "OBTAINING PW INSPECTOR'S CLEARANCE TO ALLOW ISSUANCE
OF A CERTIFICATE OF OCCUPANCY"**





OBTAINING PUBLIC WORKS INSPECTOR'S CLEARANCE TO ALLOW ISSUANCE OF A CERTIFICATE OF OCCUPANCY

These instructions should be used as guidelines to obtain Certificate of Occupancy (C of O) clearances from Public Works inspectors.

Instructions:

1. Completion of Precise Grading. The grading, per the approved precise grading plan, and any associated onsite/offsite public improvements must be 100% complete and the site must be ready for final inspection.
2. Scheduling an Inspection. Public Works (PW) inspections shall be scheduled by calling the **PW Inspection Line at (951) 308-6395**. Verbal inspection requests made directly to the PW Inspector may not be accommodated.
 - (a) Inspections must be requested no later than 3:30 pm the day prior to the requested date of inspection (i.e., an inspection for Thursday must be called in no later than Wednesday at 3:30 pm).
 - (b) More than 1 inspection may be requested per call, but they must be **specific** and all relevant information provided.
3. Submittal of Required Items. The following items shall be presented to the PW Inspector, upon arrival for the scheduled inspection:
 - (a) For tracts, engineering certification for each lot (i.e., including certification of swales and pad elevations, etc.);
 - (b) For all non-residential projects, engineering certification for each lot (i.e., including certification of WQMP compliance, installation of required WQMP systems/BMP's, swales, pad elevations, etc.);
 - (c) For custom single family and non-residential projects, pad compaction certification/final soils report.
4. Clearances from Utility Agencies. Obtain clearances from the following independent utility agencies. Note that a copy of their release letters should accompany the C of O sign-off sheet.
 - (a) Rancho California Water District (RCWD); contact **Hilda Bojorquez** at **(951) 296-6984 or 296-6900**
 - (b) Eastern Municipal Water District (EMWD); contact **Michelle Burris** at **(951) 928-3777 ext. 4372**
5. Inspection Clearance. After the inspection, if the PW Inspector finds the work...
 - (a) acceptable, the PW inspector's clearance for the project site will be provided. Prior to proceeding to City Hall to obtain the C of O, it is highly recommended that the Community Development Technician be contacted to confirm all other outstanding City department clearances **as well as the required clearances from utility agencies**. Please allow **a reasonable time** for City staff to process all departments' clearances;
or
 - (b) unacceptable, the PW inspector will identify field deficiencies and the project site will not be cleared. All deficiencies must be addressed prior to requesting/scheduling a follow-up inspection.

APPENDIX U "SECURITY FORMS FOR IMPROVEMENTS WITHIN PUBLIC R/W"

U

RECORDED AT REQUEST OF AND
WHEN RECORDED RETURN TO:

CITY OF TEMECULA
Susan W. Jones, MMC
City Clerk
41000 Main Street
Temecula, CA 92590
P.O. Box 9033
Temecula, CA 92590-9033

EXEMPT FROM RECORDER'S FEES
PURSUANT TO GOVERNMENT CODE
SECTIONS 6103 AND 27383

Space above this line for Recorder's Use Only

SUBDIVISION IMPROVEMENT AGREEMENT

(Secured with Bonds, Cash/Certificate of Deposit or Letter of Credit)

THIS SUBDIVISION IMPROVEMENT AGREEMENT is made and entered into the _____ day of _____, 20__ by and between the City of Temecula, California, a Municipal Corporation of the State of California, hereinafter referred to as CITY, and the SUBDIVIDER.

RECITALS

A. SUBDIVIDER warrants and represents to CITY that the following contact information is true and correct:

Tentative Map Resolution of Approval or Planning Application No.:	
Name of Subdivision:	Tract No.:
Name/Address of SUBDIVIDER:	Anticipated Completion Date:
SUBDIVIDER'S Contact Name/Phone No.:	
Estimated Total Cost of: (a) Improvements: \$_____ (b) Monumentation: \$_____	
Name, Address, Contact Name and Phone No. of Surety Company or Issuing Bank :	

B. SUBDIVIDER has presented to CITY for approval and recordation, a final subdivision map of a proposed subdivision pursuant to provisions of the Subdivision Map Act of the State of California and the CITY ordinances and regulations relating to the filing, approval and recordation of subdivision maps. The Subdivision Map Act and the CITY ordinances and regulations relating to the filing,

approval and recordation of subdivision maps are collectively referred to in this Agreement as the "Subdivision Laws."

C. A tentative map of the Subdivision has been approved, subject to the Subdivision Laws and to the requirements and conditions contained in the Resolution of Approval. The Resolution of Approval is on file in the Office of the City Clerk and is incorporated into this agreement by reference.

D. The Subdivision Laws establish as a condition precedent to the approval of a final map that SUBDIVIDER must have complied with the Resolution of Approval and must have either (a) completed, in compliance with CITY standards, all the improvements and land development work required by the Subdivision Laws and the Resolution of Approval or, (b) have entered into a secured Agreement with CITY to complete the Improvements and land development within a period of time specified by CITY.

E. In consideration of approval of a final map for the Subdivision by the City Council, SUBDIVIDER desires to enter into this Agreement, whereby SUBDIVIDER promises to install and complete, at SUBDIVIDER'S own expense, all the public improvement work required by CITY in connection with the proposed subdivision. SUBDIVIDER has secured this Agreement by improvement security required by the Subdivision Laws and approved by the City Attorney.

F. Complete improvement plans for the construction; installation and completion of the improvements required by the Resolution of Approval have been prepared by SUBDIVIDER and approved by the City Engineer ("Improvement Plans"). The Improvement Plans are on file in the Office of the City Engineer and are incorporated into this Agreement by this reference. All references in this Agreement to the Improvement Plans shall include reference to any specifications for the Improvements as approved by the City Engineer. The facilities to be constructed pursuant to the Improvement Plans shall be known as the "Improvements."

G. An estimate of the cost of construction of the Improvements according to the Improvement Plans has been made and had been approved by the City Engineer. The estimated amount is stated in the Recitals of this Agreement. The basis for the estimate is attached as **Exhibit "A"** to this Agreement.

H. The CITY has adopted standards for the construction and installation of improvements within the CITY. The Improvement Plans have been prepared in conformance with the CITY standards in effect on the date of approval of the Resolution of Approval.

I. Within thirty (30) days after completion of the required Improvements and their acceptance by CITY, it is necessary that certain monuments and stakes as specified on the final map for the SUBDIVISION, shall be installed and, also, that street signs be placed at intersections.

J. SUBDIVIDER recognizes that by approval of the final map for Subdivision, CITY has conferred substantial rights upon SUBDIVIDER, including the right to sell, lease, or finance lots within the Subdivision, and has taken the final act necessary to subdivide the property within the Subdivision. As a result, CITY will be damaged to the extent of the cost of installation of the Improvements by SUBDIVIDER'S failure to perform its obligations under this Agreement, including, but not limited to, SUBDIVIDER'S obligation to complete construction of the Improvements by the time established in this Agreement. CITY shall be entitled to all remedies available to it pursuant to this Agreement and the Subdivision Laws in the event of a default by SUBDIVIDER. It is specifically recognized that the determination of whether a reversion to acreage or rescission of the Subdivision constitutes an adequate remedy for default by the SUBDIVIDER shall be within the sole discretion of CITY.

NOW, THEREFORE, in consideration of the approval and recordation by the City Council of the final map of the Subdivision, SUBDIVIDER and CITY agree as follows:

1. SUBDIVIDER'S Obligations to Construct Improvements. SUBDIVIDER shall:

- a. Comply with all requirements of the Resolution of Approval, and any amendments thereto, and with provisions of the Subdivision laws.
 - b. Complete by the time established in Section 19 of this Agreement and at SUBDIVIDER'S own expense, all the public improvement work required on the Tentative Map and Resolution of Approval in conformance with the Improvement Plans and the CITY standards.
 - c. To the extent required by Labor Code Section 1720, SUBDIVIDER and its contractors shall pay prevailing wages for all work performed for the construction, alteration, demolition, installation, or repair for construction of the Improvements required by this Agreement. In accordance with the provisions of Section 1773 of the Labor Code of the State of California, the City Council has obtained the general prevailing rate of per diem wages and the general rate for holiday and overtime work in this locality for each craft, classification, or type of workman needed to perform the work required by this Agreement from the Director of the Department of Industrial Relations. These rates are on file with the City Clerk of Temecula and copies may be obtained at cost at the City Clerk's Office. SUBDIVIDER shall post a copy of such wage rates at the job site and shall pay the adopted prevailing wage rate as a minimum. SUBDIVIDER shall comply with the provisions of Sections 1773.8, 1775, 1776, 1777.5, 1777.6 and 1813 of the Labor Code and other applicable laws and regulations with respect to the payment of prevailing wages. Pursuant to the provisions of 1775 of the Labor Code, SUBDIVIDER shall forfeit to the CITY, as a penalty, the sum of \$50.00 for each calendar day, or portion thereof, for each laborer, worker, or mechanic employed, paid less than the stipulated prevailing rates for any work done under this Agreement, by it or by any subcontractor under it, in violation of the provisions of the Agreement or in violation of any applicable laws or regulations pertaining to the payment of prevailing wages.
 - d. Furnish the necessary materials for completion of the Improvements in conformity with the Improvement Plans and CITY standards.
 - e. Acquire and dedicate, or pay the cost of acquisition by CITY, of all right-of-way, easements and other interests in real property for construction or installation of the Improvements, free and clear of all liens and encumbrances. The SUBDIVIDER'S obligations with regard to acquisition by CITY of off-site right-of-way, easements and other interests in real property shall be subject to a separate Agreement between SUBDIVIDER and CITY. SUBDIVIDER shall also be responsible for obtaining any public or private drainage easements or authorizations to accommodate the SUBDIVISION.
 - f. Install all SUBDIVISION monuments required by law within thirty (30) days after the completion and acceptance of the Improvements by the CITY.
 - g. Install street name signs conforming to CITY standards. If permanent street name signs have not been installed before acceptance of the Improvements by the CITY, SUBDIVIDER shall install temporary street name signs according to such conditions as the City Engineer may require.
2. Acquisition and Dedication of Easement of Right-of-Way. If any of the Improvements contemplated by this Agreement is to be constructed or installed on land not owned by SUBDIVIDER, no construction or installation shall be commenced before:
- a. The offer of dedication to CITY of appropriate right-of-way, easements or other interest in real property, and appropriate authorization from the property owner to allow construction or installation of the Improvements, or
 - b. The dedication to, and acceptance by, the CITY of appropriate right-of-way, easements or other interests in real property, as determined by the City Engineer, or

- c. The issuance by a court of competent jurisdiction pursuant to the State Eminent Domain Law of an order of possession. SUBDIVIDER shall comply in all respects with the order of possession.
3. Security. SUBDIVIDER shall at all times guarantee SUBDIVIDER'S performance of this Agreement by furnishing to CITY, and maintaining, good and sufficient security as required by the Subdivision Laws on forms approved by CITY for the purposes and in the amounts as follows:
- a. To assure faithful performance of this Agreement in regard to said Improvements in an amount of 100% of the estimated cost of the Improvements; and
 - b. To secure payment to any contractor, subcontractor, persons renting equipment, or furnishing labor materials for the Improvements required to be constructed or installed pursuant to this Agreement in the additional amount of 50% of the estimated cost of the Improvements; and
 - c. To guarantee or warranty the work done pursuant to this Agreement for a period of one year following acceptance thereof by CITY against any defective work or labor done or defective materials furnished in the additional amount of 10% of the estimated cost of the Improvements; and
 - d. To assure proper setting of subdivision monumentation, as stated previously in this Agreement, SUBDIVIDER shall also furnish to CITY good and sufficient security in the amount of 100% of the estimated cost of setting subdivision monuments.

The securities required by this Agreement shall be kept on file with the City Clerk. The terms of the security documents referenced in the Recitals of this Agreement are incorporated into this Agreement by this reference. If any security is replaced by another approved security, the replacement shall be filed with the City Clerk and, upon filing, shall be deemed to have been made a part of and incorporated into this Agreement. Upon filing of a replacement security with the City Clerk, the former security may be released.

4. Alterations to Improvement Plans.
- a. Any changes, alterations or additions to the Improvement Plans and specifications or to the Improvements, not exceeding 10% of the original estimated cost of the Improvements, which are mutually agreed upon by the CITY and SUBDIVIDER, shall not relieve the improvement security given for faithful performance of this Agreement. In the event such changes, alterations, or additions exceed 10% of the original estimated cost of the Improvements, SUBDIVIDER shall provide improvement security for faithful performance as required by Paragraph 3 of this Agreement for 100% of the total estimated cost of the improvement as changed, altered, or amended, minus any completed partial releases allowed by Paragraph 6 of this Agreement.
 - b. The SUBDIVIDER shall construct the Improvements in accordance with the CITY standards in effect at the time of adoption of the Resolution of Approval. CITY reserves the right to modify the standards applicable to the SUBDIVISION and this Agreement, when necessary to protect the public health, safety and welfare or comply
5. Inspection. SUBDIVIDER shall at all times maintain proper facilities and safe access for inspection of the Improvements by CITY inspector and to the shops wherein any work is in preparation. Upon completion of the work the SUBDIVIDER may request a final inspection by the City Engineer, or the City Engineer's authorized representative. If the City Engineer, or the designated representative, determines that the work has been completed in accordance with this Agreement, then the City Engineer shall certify the completion of the Improvements to the City Council. No Improvements shall be finally accepted unless aspects of the work have been inspected and determined to have been completed in accordance with the Improvement Plans and CITY standards. SUBDIVIDER shall bear all costs of inspection and certification.

6. Release of Securities. Subject to approval by the City Council of CITY, the securities required by this Agreement shall be released as follows:
- a. Security given for faithful performance of any act, obligation, work or agreement shall be released upon the final completion and acceptance of the act or work, subject to the provisions of subsection (b) hereof.
 - b. In accordance with the requirements of Government Code Section 64999.7, the City Engineer shall allow a partial release of faithful performance security pursuant to the following procedures. No partial release of securities for labor and materials shall be allowed.
 - (1) SUBDIVIDER shall have one opportunity to engage in the process of partial release of performance securities as described in this subsection (b) between the start of work and completion and acceptance of all work on the Improvements. The process allowing for a partial release of performance security shall occur only when the cost estimate of the remaining work does not exceed twenty percent (20%) of the total original performance security.
 - (2) At such time that the SUBDIVIDER believes that the obligation to perform the work for which the performance security was required is complete, the SUBDIVIDER may notify the City Engineer in writing of the completed work and shall include with such notification a written list of work completed. Upon receipt of the written notice, the City Engineer shall have forty-five (45) days to review and comment or approve the completion of the required work. If the City Engineer does not agree that all work has been completed in accordance with the plans and specifications for the Improvements, he or she shall supply to the SUBDIVIDER a list of all remaining work to be completed.
 - (3) Within forty-five (45) days of receipt of the list of remaining work from the City Engineer, the SUBDIVIDER may then provide cost estimates for all remaining work for review and approval by the City Engineer. Upon receipt of the cost estimates, the City Engineer shall then have forty-five (45) days to review, comment, and approve, modify, or disapprove those cost estimates.
 - (4) If the City Engineer approves the cost estimate, the City Engineer shall release all performance security except for performance security in an amount up to two hundred percent (200%) of the cost estimate of the remaining work. Substitute bonds or other security may be used as a replacement for the performance security, subject to the approval of the City Engineer in accordance with the standards for approval of the original bonds. If substitute bonds or other security is used as a replacement for the performance security released, the release shall not be effective unless and until the City Engineer receives and approves that form of replacement security as provided for the original security. A reduction in the performance security, authorized under this subsection, is not, and shall not be deemed to be, an acceptance by the City Engineer or the City of the Improvements, and the risk of loss or damage to the Improvements and the obligation to maintain the Improvements shall remain the sole responsibility of the SUBDIVIDER until all Improvements have been accepted by the City Council and all other required improvements have been fully completed in accordance with the plans and specifications for the Improvements.
 - (5) The SUBDIVIDER shall be under the affirmative duty to continue to construct the Improvements in accordance with the Improvement Plans until all remaining items are accepted by the City Council.
 - c. Within forty-five (45) days of completion, as determined by the City Engineer, the City Engineer shall notify the SUBDIVIDER that he or she has determined the Improvements to be complete. Within forty-five (45) days of the issuance of the notification by the City Engineer, the release of any remaining performance security shall be placed upon the agenda of the City Council for acceptance of the Improvements and approval of the release of any remaining performance security. Such acceptance shall not constitute a waiver of defects by CITY. As used in this

Agreement the term "completion" shall mean that all items of work necessary to complete the Improvements in accordance with the Improvement Plans have been constructed to the satisfaction of the City Engineer and that no items remain on the punch list prepared by the City Engineer. "Completion" shall not mean partial use or beneficial use of the Improvement.

- d. Within forty-five (45) days following the expiration of the time within which claims of lien are required to be recorded pursuant to Article 2 (commencing with Section 8410) of Chapter 4 of Title 2 of Part 6 of Division 4 of the Civil Code and acceptance of the Improvements, the security given to secure payment to the contractor, his or her subcontractors and to persons furnishing labor, materials or equipment shall be reduced to an amount equal to the total claimed by all claimants for who lien have been filed and of which notice has been given to the legislative body, plus an amount reasonably determined by the City Engineer to be required to assure the performance of any other obligations secured by the Security. (Section 8410 of the Civil Code currently provides that such liens must be recorded within (1) ninety (90) days after completion of the Improvement if no notice of completion or cessation has been recorded or (2) sixty (60) days after recordation of a notice of completion or a notice of cessation.) The balance of the security shall be released upon the settlement of all claims and obligations for which the security was given.
 - e. No security given for the guarantee or warranty of work shall be released until the expiration of the warranty period and until any claims filed during the warranty period have been settled. As provided in paragraph 10, the warranty period shall not commence until final acceptance of all the work and Improvements by the City Council.
 - f. The CITY may retain from any security released, an amount sufficient to cover costs and reasonable expenses and fees, including reasonable attorney's fees.
 - g. The Surety's liability under any bonds or other forms of security provided pursuant to this Agreement shall be released only upon final completion and CITY's acceptance of the work required pursuant to this Agreement.
7. Injury to Improvements, Public Property or Public Utility Facilities. SUBDIVIDER shall replace or have replaced, or repair or have repaired, as the case may be, all Improvements, public utility facilities and surveying or subdivision monuments which are destroyed or damaged as a result of any work under this Agreement. SUBDIVIDER shall bear the entire cost of replacement or repairs of any and all public or public utility property damaged or destroyed by reason of any work done under this Agreement, whether such property is owned by the United States or any agency thereof, or the State of California, or any agency or political subdivision thereof, or by the CITY or any public or private utility corporation or by any combination of such owners. Any repair or replacement shall be to the satisfaction, and subject to the approval, of the City Engineer.
8. Permits. SUBDIVIDER shall, at SUBDIVIDER'S expense, obtain all necessary permits and licenses for the construction and installation of the Improvements, give all necessary notices and pay all fees and taxes required by law.
9. Default of SUBDIVIDER.
- a. Default of SUBDIVIDER shall include, but not limited to: (1) SUBDIVIDER'S failure to timely commence construction of this Agreement; (2) SUBDIVIDER'S failure to timely complete construction of the Improvements; (3) SUBDIVIDER'S failure to timely cure any defect in the Improvements; (4) SUBDIVIDER'S failure to perform substantial construction work for a period of 20 calendar days after commencement of the work; (5) SUBDIVIDER'S insolvency, appointment of a receiver, or the filing of any petition in bankruptcy either voluntary or involuntary which SUBDIVIDER fails to discharge within thirty (30) days; (6) the commencement of a foreclosure action against the SUBDIVISION or a portion thereof, or any conveyance on lieu or in avoidance of foreclosure; or (7) SUBDIVIDER'S failure to perform any other obligation under this Agreement.

- b. The CITY reserves to itself all remedies available to it at law or in equity for breach of SUBDIVIDER'S obligations under this Agreement. The CITY shall have the right, subject to this Section, to draw upon or utilize the appropriate security to mitigate CITY damages in event of default by SUBDIVIDER. The right of CITY to draw upon or utilize the security is additional to and not in lieu of any other remedy available to CITY. It is specifically recognized that the estimated costs and security amounts may not reflect the actual cost of construction or installation of the Improvements and, therefore, CITY damages for SUBDIVIDER'S default shall be measured by the cost of completing the required Improvements. The sums provided by the improvement security may be used by CITY for the completion of the Improvements in accordance with the improvement plans and specifications contained herein.
 - c. In the event of SUBDIVIDER'S default under this Agreement, SUBDIVIDER authorizes CITY to perform such obligation twenty (20) days after mailing written notice of default to SUBDIVIDER and to SUBDIVIDER'S Surety, and agrees to pay the entire cost of such performance by CITY.
 - d. CITY may, but is not required to, take over the work and prosecute the same to completion, by contract or by any other method CITY may deem advisable, for the account and at the expense of SUBDIVIDER, and SUBDIVIDER'S Surety shall be liable to CITY for any excess cost or damages occasioned CITY thereby; and, in such event, CITY, without liability for so doing, may take possession of, and utilize in completing the work, such materials, appliances, plant and other property belonging to SUBDIVIDER as may be on the site of the work and necessary for performance of the work.
 - e. Failure of SUBDIVIDER to comply with the terms of this Agreement shall constitute consent to the filing by CITY of a notice of violation against all the lots in the SUBDIVISION, or to rescind the approval or otherwise revert the SUBDIVISION to acreage. The remedy provided by this Subsection is in addition to and not in lieu of other remedies available to CITY. SUBDIVIDER agrees that the choice of remedy or remedies for SUBDIVIDER'S breach shall be in the discretion of CITY.
 - f. In the event that SUBDIVIDER fails to perform any obligation hereunder, SUBDIVIDER agrees to pay all costs and expenses incurred by CITY in securing performance of such obligations, including costs of suit and reasonable attorney's fees.
 - g. The failure of CITY to take an enforcement action with respect to a default, or to declare a breach, shall not be construed as a waiver of that default or breach or any subsequent default or breach of SUBDIVIDER.
10. Warranty. SUBDIVIDER shall guarantee or warranty the work done pursuant to this Agreement for a period of one year after final acceptance by the City Council of the work and Improvements against any defective work or labor done or defective materials furnished. Where certain Improvements are to be constructed in phases or sections, the one year warranty period shall commence after CITY acceptance of the last completed portion of the Improvements. If within the warranty period any work or Improvement or part of any work or Improvement done, furnished, installed, constructed or caused to be done, furnished, installed or constructed by SUBDIVIDER fails to fulfill any of the requirements of this Agreement or the Improvement Plans, SUBDIVIDER shall without delay and without any cost to CITY, repair or replace or reconstruct any defective or otherwise unsatisfactory part or parts of the work or structure. Should SUBDIVIDER fail to act promptly or in accordance with this requirement, SUBDIVIDER hereby authorizes CITY at CITY option, to perform the work twenty (20) days after mailing written notice of default to SUBDIVIDER and to SUBDIVIDER'S and agrees to pay the cost of such work by CITY. Should the CITY determine that an urgency requires repairs or replacements to be made before SUBDIVIDER can be notified, CITY may, in its sole discretion, make the necessary repairs or replacement or perform the necessary work and SUBDIVIDER shall pay to CITY the cost of such repairs.

11. SUBDIVIDER Not Agent of CITY. Neither SUBDIVIDER nor any of SUBDIVIDER'S agents or contractors are or shall be considered to be agents of CITY in connection with the performance of SUBDIVIDER'S obligations under this Agreement.

12. Injury to Work. Until such time as the Improvements are accepted by CITY, SUBDIVIDER shall be responsible for and bear the risk of loss to any of the Improvements constructed or installed. Until such time as all Improvements required by this Agreement are fully completed and accepted by CITY, SUBDIVIDER will be responsible for the care, maintenance of, and any damage to such improvement. CITY shall not, nor shall any officer or employee thereof, be liable or responsible for any accident, loss or damage, regardless of cause, happening or occurring to the work or Improvements specified in this Agreement prior to the completion and acceptance of the work or Improvements. All such risks shall be the responsibility of and are hereby assumed by SUBDIVIDER.

13. Other Agreements. Nothing contained in this Agreement shall preclude CITY from expending monies pursuant to Agreements concurrently or previously executed between the parties, or from entering into Agreements with other subdividers for the apportionment of costs of water and sewer mains, or other improvements, pursuant to the provisions of the CITY ordinance providing therefore, nor shall anything in this Agreement commit CITY of any such apportionment.

14. SUBDIVIDER'S Obligation to Warn Public During Construction. Until final acceptance of the Improvements, SUBDIVIDER shall give good and adequate warning to the public of each and every dangerous condition existent in said Improvements, and will take all reasonable actions to protect the public from such dangerous condition.

15. Vesting of Ownership. Upon acceptance of the work on behalf of CITY and recordation of the Notice of Completion, ownership of the Improvements constructed pursuant to this Agreement shall vest in CITY.

16. Indemnity/Hold Harmless. CITY or any officer or employee thereof shall not be liable for injury to persons or property occasioned by reason of the acts or omissions of SUBDIVIDER, its agents or employees in the performance of this Agreement. SUBDIVIDER further agrees to protect and hold harmless CITY, its officials and employees from any and all claims, demands, causes or action, liability or loss of any sort, because of, or arising out of, acts or omissions of SUBDIVIDER, its agents or employees in the performance of this Agreement, including all claims, demands, causes of action, liability, or loss because of, or arising out of, in whole or in part, the design or construction of the Improvements. This indemnification and agreement to hold harmless shall extend to injuries to persons and damages or taking of property resulting from the design or construction of said subdivision, and the Improvements as provided herein, and in addition, to adjacent property owners as a consequence of the diversion of waters from the design or construction of public drainage systems, streets and other Improvements. Acceptance by the CITY of the Improvements shall not constitute an assumption by the CITY of any responsibility for the design or construction of the subdivision or the Improvements pursuant to the approved improvement plans or map, regardless of any negligent action or inaction taken by the CITY in approving the plans or map, unless the particular improvement design was specifically required by CITY over written objection by SUBDIVIDER submitted to the City Engineer before approval of the particular improvement design, which objection indicated that the particular improvement design was dangerous or defective and suggested an alternative safe and feasible design. After acceptance of the Improvements, the SUBDIVIDER shall remain obligated to eliminate any defect in design or dangerous condition causes by the design or construction defect; however SUBDIVIDER shall not be responsible for routine maintenance. Provisions of this paragraph shall remain in full force and effect for ten years following the acceptance by the CITY of Improvements. It is the intent of this action that SUBDIVIDER shall be responsible for all liability for design and construction of the Improvements installed or work done pursuant to this Agreement and that CITY shall not be liable for any negligence, nonfeasance, misfeasance or malfeasance in approving, reviewing, checking, or correcting any plans or

specifications or in approving, reviewing or inspecting any work or construction. The improvement security shall not be required to cover the provisions of this paragraph.

17. Sale or Disposition of SUBDIVISION. Sale or other disposition of this property will not relieve SUBDIVIDER from the obligations set forth herein. If SUBDIVIDER sells the property or any portion of the property within the SUBDIVISION to any other person, the SUBDIVIDER may request a novation of this Agreement and a substitution of security. Upon approval of the novation and substitution of securities, the SUBDIVIDER may request a release or reduction of the securities required by this Agreement. Nothing in the novation shall relieve the SUBDIVIDER of the obligations under Paragraph 17 for the work or improvement done by SUBDIVIDER.

18. Time of the Essence. Time is of the essence of this Agreement.

19. Time for Completion of Work/Time Extension. SUBDIVIDER shall complete construction of the Improvements required by this Agreement within twenty-four (24) months of this Agreement. In the event good cause exists as determined by the City Engineer, the time for completion of the Improvements hereunder may be extended. The extension shall be made by writing executed by the City Engineer. Any such extension may be granted without notice to SUBDIVIDER'S Surety and shall not affect the validity of this Agreement or release the Surety or Sureties on any security given for this Agreement. The City Engineer shall be the sole and final judge as to whether or not good cause has been shown to entitle SUBDIVIDER to an extension. Delay, other than delay in the commencement of work, resulting from an act of CITY, or by an act of God, which SUBDIVIDER, could not have reasonable foreseen, or by storm or inclement weather which prevent the conducting of work, and which were not caused by or contributed to by SUBDIVIDER, shall constitute good cause for an extension of time for completion. As a condition of such extension, the City Engineer may require SUBDIVIDER to furnish new security guaranteeing performance of this Agreement as extended in an increased amount as necessary to compensate for any increase in construction costs as determined by the City Engineer.

20. Legal Responsibilities. The SUBDIVIDER shall keep itself informed of all local, State and Federal Laws and regulations which in any manner affect those employed by it or in any way affect the performance of its obligations pursuant to this Agreement. The SUBDIVIDER shall at all times observe and comply with all such laws and regulations and shall require its contractors and subcontractors to comply with all such laws and regulations. The CITY, and its officers and employees, shall not be liable at law or in equity occasioned by failure of the SUBDIVIDER to comply with this Section.

21. No Vesting of Rights. Performance by SUBDIVIDER of this Agreement shall not be construed to vest SUBDIVIDER'S rights with respect to any change in any zoning or building law or ordinance.

Notice to CITY:

Notice to SUBDIVIDER:

City of Temecula	
Greg Butler	
Director of Public Works/City Engineer	
41000 Main Street; P.O. Box 9033	
Temecula, CA 92590-9033	

23. Severability. The provisions of this Agreement are severable. If any portion of this Agreement is held invalid by a court of competent jurisdiction, the remainder of the Agreement shall remain in full force and effect unless amended or modified by the mutual consent of the parties.

24. Captions. The captions of this Agreement are for convenience and reference only and shall not define, explain, modify, limit, exemplify, or aid in the interpretation, construction or meaning of any provisions of this Agreement.
25. Litigation or Arbitration. In the event that suit or arbitration is brought to enforce the terms of this contract, the prevailing party shall be entitled to litigation costs and reasonable attorney's fees.
26. Incorporation of Recitals. The Recitals to this Agreement are hereby incorporated into the terms of this Agreement.
27. Entire Agreement. This Agreement constitutes the entire Agreement of the parties with respect to the subject matter. All modifications, amendments, or waivers of the terms of this Agreement must be in writing and signed by the appropriate representatives of the parties. In the case of the CITY, the appropriate party shall be the City Manager.

IN WITNESS WHEREOF, this Agreement is executed by CITY, by and through its Mayor.

SUBDIVIDER*

CITY OF TEMECULA

By: _____

Michael S. Naggar
Mayor

Name: _____

Title: _____

By: _____

ATTEST:

Name: _____

Susan W. Jones, MMC
City Clerk

Title: _____

(Proper Notarization of SUBDIVIDER'S
signature is required and shall be attached)

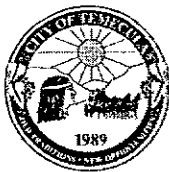
RECOMMENDED FOR APPROVAL:

* Two signatures are required for corporations
unless corporate documents are provided that
indicate otherwise.

Greg Butler
Director of Public Works/City Engineer

APPROVED AS TO FORM:

Peter M. Thorson
City Attorney



**PUBLIC WORKS DEPARTMENT
Land Development Division
Subdivision Faithful Performance Bond**

WHEREAS, the City of Temecula, State of California, and _____
(hereinafter designated as "Principal") have entered into an agreement whereby Principal agrees to install and complete certain designated public improvements, which said agreement, identified as Project _____ and dated _____, 20____ ("Agreement"), is hereby referred to and made a part hereof; and

WHEREAS, Principal is required under the terms of the Agreement to furnish a bond for the Faithful Performance of the Agreement:

NOW, THEREFORE, we the Principal and _____ as Surety, are held and firmly bound unto the City of Temecula, California, in the penal sum of \$ _____ lawful money of the United States, for the payment of such sum well and truly to be made, we bind ourselves, our heirs, successors, executors and administrators, jointly and severally.

The condition of this obligation is such that the obligation shall become null and void if the above-bounded Principal, his or its heirs, executors, administrators, successors, or assigns, shall in all things stand to, abide by, well and truly keep, and perform the covenants, conditions, and provisions in the Agreement and any alteration thereof made as therein provided, on his or their part, to be kept and performed at the time and in the manner therein specified, and in all respects according to this or their true intent and meaning, and shall indemnify and save harmless the City of Temecula, its officers, agents, and employees, as therein stipulated; otherwise, this obligation shall be and remain in full force and effect.

As a part of the obligation secured hereby and in addition to the face amount specified therefore, there shall be included costs and reasonable expenses and fees, including reasonable attorney's fees, incurred by City in successfully enforcing such obligation, all to be taxed as costs and included in any judgment rendered.

The Surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Agreement or to the work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Agreement or to the work or to the specifications. The Surety further stipulates and agrees that its obligations and liability on this bond shall be released only upon final completion and City's acceptance of the work required pursuant to this Agreement.

IN WITNESS WHEREOF, this instrument has been duly executed by the Principal and Surety
above named, on _____, 20__.

[SEAL]

[SEAL]

SURETY

By: _____

(Name)

(Title)

PRINCIPAL

By: _____

By: _____
(Name)

(Title)

By: _____

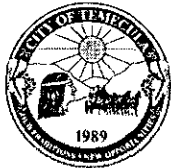
(Name)

(Title)

APPROVED AS TO FORM

Peter M. Thorson
City Attorney

* Two signatures are required for corporations
unless corporate documents are provided
that indicate otherwise.



**PUBLIC WORKS DEPARTMENT
Land Development Division
Subdivision Labor & Materials Bond**

WHEREAS, the City of Temecula, State of California, and _____
(hereinafter designated as "Principal") have entered into an agreement whereby Principal agrees to install and complete certain designated public improvements, which said agreement, identified as Project _____ dated _____, 20__ ("Agreement"), is hereby referred to and made a part hereof; and

WHEREAS, under the terms of said Agreement, Principal is required before entering upon the performance of the work, to file a good and sufficient payment bond with the City of Temecula, to secure the claims to which reference is made in Title 15 (commencing with Section 3082) of Part 4 of Division 3 of the Civil Code of the State of California; and

NOW, THEREFORE, we the Principal and _____ as Surety, are held and firmly bound unto the City of Temecula, California, and all contractors, subcontractors, laborers, material men, and other persons employed in the performance of the aforesaid Agreement and referred to in Title 15 of the Civil Code, in the penal sum of \$_____, lawful money of the United States, for materials furnished or labor thereon of any kind, or for amounts due under the Unemployment Insurance Act with respect to such work or labor, the Surety will pay the same in an amount not exceeding the amount set forth.

As a part of the obligation secured hereby and in addition to the face amount specified therefore, there shall be included costs and reasonable expenses and fees, including reasonable attorney's fees, incurred by City in successfully enforcing such obligation, all to be taxed as costs and included in any judgment rendered.

It is hereby expressly stipulated and agreed that this bond shall inure to the benefit of any and all persons, companies and corporations entitled to file claims under Title 15 (commencing with Section 3082) of Part 4 of Division 3 of the Civil Code, so as to give a right of action to them or their assigns in any suit brought upon this bond.

If the condition of this bond is fully performed, then this obligation shall become null and void; otherwise, it shall be and remain in full force and effect.

The Surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Agreement or to the work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Agreement or to the work or to the specifications. The Surety further stipulates and agrees that its obligations and liability on this bond shall be released only upon final completion and City's acceptance of the work required pursuant to this Agreement.

IN WITNESS WHEREOF, this instrument has been duly executed by the Principal and Surety
above named, on _____, 20__.

[SEAL]

[SEAL]

SURETY

By: _____

(Name)

(Title)

PRINCIPAL

By: _____
By: _____
(Name)

(Title)

By: _____

(Name)

(Title)

APPROVED AS TO FORM

Peter M. Thorson
City Attorney

* Two signatures are required for corporations
unless corporate documents are provided
that indicate otherwise.

RECORDED AT REQUEST OF AND
WHEN RECORDED RETURN TO:

CITY OF TEMECULA
Susan W. Jones, MMC
City Clerk
41000 Main Street
Temecula, CA 92590
P.O. Box 9033
Temecula, CA 92590-9033

EXEMPT FROM RECORDER'S FEES
PURSUANT TO GOVERNMENT CODE
SECTIONS 6103 AND 27383

Space above this line for Recorder's Use Only

SUBDIVISION MONUMENT AGREEMENT

(Secured with Bonds, Cash/Certificate of Deposit and/or Letter of Credit)

This agreement is made and entered into the _____ day of _____, 20__ by and between the City of Temecula, California, a Municipal Corporation of the State of California, hereinafter referred to as CITY, and the SUBDIVIDER.

RECITALS

A. SUBDIVIDER has presented to City the following contact information:

Tentative Map Resolution of Approval or Planning Application No.:	
Name of Subdivision:	Tract No.:
Name/Address of SUBDIVIDER:	Anticipated Completion Date:
SUBDIVIDER'S Contact Name/Phone No.:	
Estimated Total Cost of: (a) Improvements: \$_____ (b) Monumentation: \$_____	
Name, Address, Contact Name and Phone No. of Surety Company & Bond No. :	
Name, Address, Contact Name and Phone No. of Bank & Certificate of Deposit No. :	

B. SUBDIVIDER has presented to CITY for approval and recordation, a final subdivision map of a proposed subdivision pursuant to provisions of the Subdivision Map Act of the State of California and the CITY ordinances and regulations relating to the filing, approval and recordation of subdivision maps. The Subdivision Map Act and the CITY ordinances and regulations relating to the filing, approval and recordation of subdivision maps are collectively referred to in this Agreement as the "Subdivision Laws".

C. A tentative map of the SUBDIVISION has been approved, subject to the Subdivision Laws and to the requirements and conditions contained in the Resolution of Approval. The Resolution of Approval is on file in the Office of the City Clerk and is incorporated into this agreement by reference.

D. The Subdivision Laws establish as a condition precedent to the approval of a final map that SUBDIVIDER must have complied with the Resolution of Approval and must have either (a) completed, in compliance with CITY standards, all the improvements and land development work required by the Subdivision Laws and the Resolution of Approval or, (b) have entered into a secured Agreement with CITY to complete the improvements and land development within a period of time specified by CITY.

E. In consideration of approval of a final map for the SUBDIVISION by the City Council, SUBDIVIDER desires to enter into this Agreement, whereby SUBDIVIDER promises to install and complete, at SUBDIVIDER'S own expense, all monumentation required by CITY in connection with the proposed subdivision. SUBDIVIDER has secured this Agreement by improvement security required by the Subdivision Laws and approved by the City Attorney.

F. For the purpose of this Agreement, the only improvements that remain to be completed for this unit is installation of the subdivision monumentation, and improvements as used throughout this Agreement implies said monumentation.

G. An estimate of the cost of the Subdivision Monumentation has been made and has been approved by the City Engineer. The estimated amount is stated on Page 1 of this Agreement. The basis for the estimate is attached as **Exhibit "A"** to this Agreement.

H. SUBDIVIDER recognizes that by approval of the final map for SUBDIVISION, CITY has conferred substantial rights upon SUBDIVIDER, including the right to sell, lease, or finance lots within the SUBDIVISION, and has taken the final act necessary to subdivide the property within the SUBDIVISION. As a result, CITY will be damaged to the extent of the cost of installation of the improvements by SUBDIVIDER'S failure to perform its obligations under this Agreement, including, but not limited to, SUBDIVIDER'S obligation to complete construction of the improvements by the time established in this Agreement. CITY shall be entitled to all remedies available to it pursuant to this Agreement and the Subdivision Laws in the event of a default by SUBDIVIDER. It is specifically recognized that the determination of whether a reversion to acreage or rescission of the SUBDIVISION constitutes an adequate remedy for default by the SUBDIVIDER shall be within the sole discretion of CITY.

NOW, THEREFORE, in consideration of the approval and recordation by the City Council of the final map of the SUBDIVISION, SUBDIVIDER and CITY agree as follows:

1. SUBDIVIDER'S Obligations to Construct Improvements. SUBDIVIDER shall:
 - a. Install all SUBDIVISION monuments required by law within eighteen (18) months of the date of this Agreement.

b. Prevailing Wages. Pursuant to the requirements of Labor Code Section 1720, SUBDIVIDER shall pay prevailing wages for all work performed for the construction, alteration, demolition, installation, or repair for the Street Improvement Work required by this Agreement. In accordance with the provisions of Section 1773 of the Labor Code of the State of California, the City Council has obtained the general prevailing rate of per diem wages and the general rate for holiday and overtime work in this locality for each craft, classification, or type of workman needed to execute this Contractor from the Director of the Department of Industrial Relations. These rates are on file with the City Clerk. Copies may be obtained at cost at the City Clerk's office of Temecula. SUBDIVIDER shall post a copy of such wage rates at the job site and shall pay the adopted prevailing wage rate as a minimum. SUBDIVIDER shall comply with the provisions of Sections 1773.8, 1775, 1776, 1777.5, 1777.6 and 1813 of the Labor Code and other applicable laws and regulations with respect to the payment of prevailing wages. Pursuant to the provisions of 1775 of the Labor Code, SUBDIVIDER shall forfeit to the CITY, as a penalty, the sum of \$25.00 for each calendar day, or portion thereof, for each laborer, worker, or mechanic employed, paid less than the stipulated prevailing rates for any work done under this Agreement, by it or by any subcontractor under it, in violation of the provisions of the Agreement or in violation of any applicable laws or regulations pertaining to the payment of prevailing wages.

2. Security. SUBDIVIDER shall at all times guarantee SUBDIVIDER'S performance of this Agreement by furnishing to CITY, and maintaining, good and sufficient security as required by the Subdivision Laws on forms approved by CITY for the purposes and in the amounts as follows:

a. Good and sufficient security in the amount of 100% of the estimated cost of setting subdivision monuments as stated previously in this Agreement.

The securities required by this Agreement shall be kept on file with the City Clerk. The terms of the security documents referenced on Page 1 of this Agreement are incorporated into this Agreement by this reference. If any security is replaced by another approved security, the replacement shall be filed with the City Clerk and, upon filing, shall be deemed to have been made a part of and incorporated into this Agreement. Upon filing of a replacement security with the City Clerk, the former security may be released.

3. Inspection. SUBDIVIDER shall at all times maintain proper facilities and safe access for inspection of the monumentation by CITY. Upon completion of the work the SUBDIVIDER may request a final inspection by the City Engineer, or the City Engineer's authorized representative. If the City Engineer, or the designated representative, determines that the work has been completed in accordance with this Agreement, then the City Engineer shall certify the completion of the monumentation to the City Council. SUBDIVIDER shall bear all costs of inspection and certification.

4. Release of Securities.

a. Subject to approval by the City Council of CITY, the securities given for installation of the Subdivision Monumentation, and as required by this Agreement, shall be released upon final completion and acceptance of the act of work.

b. The Surety's liability under any bonds or other forms of security provided pursuant to this Agreement shall be released only upon final completion and CITY's acceptance of the work required pursuant to this Agreement.

5. Injury to Public Improvements, Public Property or Public Utility Facilities. SUBDIVIDER shall replace or have replaced, or repair or have repaired, as the case may be, all public improvements,

public utility facilities and surveying or subdivision monuments which are destroyed or damaged as a result of any work under this Agreement. SUBDIVIDER shall bear the entire cost of replacement or repairs of any and all public or public utility property damaged or destroyed by reason of any work done under this Agreement, whether such property is owned by the United States or any agency thereof, or the State of California, or any agency or political subdivision thereof, or by the CITY or any public or private utility corporation or by any combination of such owners. Any repair or replacement shall be to the satisfaction, and subject to the approval, of the City Engineer.

6. Permits. SUBDIVIDER shall, at SUBDIVIDER'S expense, obtain all necessary permits and licenses for the construction and installation of the improvements, give all necessary notices and pay all fees and taxes required by law.
7. Default of SUBDIVIDER.
 - a. Default of SUBDIVIDER shall include, but not limited to, SUBDIVIDER'S failure to timely commence construction of this Agreement; SUBDIVIDER'S failure to timely complete construction of the monumentation; SUBDIVIDER'S insolvency, appointment of a receiver, or the filing of any petition in bankruptcy either voluntary or involuntary which SUBDIVIDER fails to discharge within thirty (30) days; the commencement of a foreclosure action against the SUBDIVISION or a portion thereof, or any conveyance on lieu or in avoidance of foreclosure; or SUBDIVIDER'S failure to perform any other obligation under this Agreement.
 - b. The CITY reserves to itself all remedies available to it at law or in equity for breach of SUBDIVIDER'S obligations under this Agreement. The CITY shall have the right, subject to this section, to draw upon or utilize the appropriate security to mitigate CITY damages in event of default by SUBDIVIDER. The right of CITY to draw upon or utilize the security is additional to and not in lieu of any other remedy available to CITY. It is specifically recognized that the estimated costs and security amounts may not reflect the actual cost of construction or installation of the improvements and, therefore, CITY damages for SUBDIVIDER'S default shall be measured by the cost of completing the required improvements. The sums provided by the improvement security may be used by CITY for the completion of the public improvements in accordance with the final map and specifications contained herein.
 - c. In the event of SUBDIVIDER'S default under this Agreement, SUBDIVIDER authorizes CITY to perform such obligation twenty days after mailing written notice of default to SUBDIVIDER and to SUBDIVIDER'S Surety, and agrees to pay the entire cost of such performance by CITY.
 - d. CITY may take over the work and prosecute the same to completion, by contract or by any other method CITY may deem advisable, for the account and at the expense of SUBDIVIDER, and SUBDIVIDER'S Surety shall be liable to CITY for any excess cost or damages occasioned CITY thereby; and, in such event, CITY, without liability for so doing, may take possession of, and utilize in completing the work, such materials, appliances, plant and other property belonging to SUBDIVIDER as may be on the site of the work and necessary for performance of the work.
 - e. Failure of SUBDIVIDER to comply with the terms of this Agreement shall constitute consent to the filing by CITY of a notice of violation against all the lots in the SUBDIVISION, or to rescind the approval or otherwise revert the SUBDIVISION to acreage. The remedy provided by this Subsection C is in addition to and not in lieu of other remedies available to CITY. SUBDIVIDER agrees that the choice of remedy or remedies for SUBDIVIDER'S breach shall be in the discretion of CITY.

- f. In the event that SUBDIVIDER fails to perform any obligation hereunder, SUBDIVIDER agrees to pay all costs and expenses incurred by CITY in securing performance of such obligations, including costs of suit and reasonable attorney's fees.
- g. The failure of CITY to take an enforcement action with respect to a default, or to declare a breach, shall not be construed as a waiver of that default or breach or any subsequent default or breach of SUBDIVIDER.
8. SUBDIVIDER Not Agent of CITY. Neither SUBDIVIDER nor any of SUBDIVIDER'S agents or contractors are or shall be considered to be agents of CITY in connection with the performance of SUBDIVIDER'S obligations under this Agreement.
9. Injury to Work. Until such time as the improvements are accepted by CITY, SUBDIVIDER shall be responsible for and bear the risk of loss to any of the improvements constructed or installed. Until such time as all improvements required by this Agreement are fully completed and accepted by CITY, SUBDIVIDER will be responsible for the care, maintenance of, and any damage to such improvement. CITY shall not, nor shall any officer or employee thereof, be liable or responsible for any accident, loss or damage, regardless of cause, happening or occurring to the work or improvements specified in this Agreement prior to the completion and acceptance of the work or improvements. All such risks shall be the responsibility of and are hereby assumed by SUBDIVIDER.
10. Other Agreements. Nothing contained in this Agreement shall preclude CITY from expending monies pursuant to Agreements concurrently or previously executed between the parties, or from entering into Agreements with other subdividers for the apportionment of costs of water and sewer mains, or other improvements, pursuant to the provisions of the CITY ordinance providing therefore, nor shall anything in this Agreement commit CITY of any such apportionment.
11. Final Acceptance of Work. Acceptance of the work on behalf of CITY shall be made by City Council upon recommendation of the City Engineer after final completion and inspection of all monumentation. The City Council shall act upon the Engineer's recommendation within thirty (30) days from the date the City Engineer certifies that the work has been finally completed, as provided in Paragraph 3.
12. Indemnity/Hold Harmless. CITY or any officer or employee thereof shall not be liable for injury to persons or property occasioned by reason of the acts or omissions of SUBDIVIDER, its agents or employees in the performance of this Agreement. SUBDIVIDER further agrees to protect and hold harmless CITY, its officials and employees from any and all claims, demands, causes or action, liability or loss of any sort, because of, or arising out of, acts or omissions of SUBDIVIDER, its agents or employees in the performance of this Agreement, including all claims, demands, causes of action, liability, or loss because of, or arising out of, in whole or in part, the installation or review of the improvements. Provisions of this paragraph shall remain in full force and effect for ten years following the acceptance by the CITY of improvements. It is the intent of this action that SUBDIVIDER shall be responsible for all liability for installation and inspection of the improvements installed or work done pursuant to this Agreement and that CITY shall not be liable for any negligence, nonfeasance, misfeasance or malfeasance in approving, reviewing, checking, or correcting any map or specifications or in approving, reviewing or inspecting any work or construction. The improvement security shall not be required to cover the provisions of this paragraph.
13. Sale or Disposition of SUBDIVISION. Sale or other disposition of this property will not relieve SUBDIVIDER from the obligations set forth herein. If SUBDIVIDER sells the property or any portion of the property within the SUBDIVISION to any other person, the SUBDIVIDER may request a

novation of this Agreement and a substitution of security. Upon approval of the novation and substitution of securities, the SUBDIVIDER may request a release or reduction of the securities required by this Agreement. Nothing in the novation shall relieve the SUBDIVIDER of the obligations under Paragraph 17 for the work or improvement done by SUBDIVIDER.

14. Time of the Essence. Time is of the essence of this Agreement.
15. Time for Completion of Work/Time Extension. SUBDIVIDER shall complete construction of the improvements required by this Agreement within eighteen (18) months of this Agreement. In the event good cause exists as determined by the City Engineer, the time for completion of the improvements hereunder may be extended. The extension shall be made by writing executed by the City Engineer. Any such extension may be granted without notice to SUBDIVIDER'S Surety and shall not affect the validity of this Agreement or release the Surety or Sureties on any security given for this Agreement. The City Engineer shall be the sole and final judge as to whether or not good cause has been shown to entitle SUBDIVIDER to an extension. Delay, other than delay in the commencement of work, resulting from an act of CITY, or by an act of God, which SUBDIVIDER, could not have reasonably foreseen, or by storm or inclement weather which prevent the conducting of work, and which were not caused by or contributed to by SUBDIVIDER, shall constitute good cause for an extension of time for completion. As a condition of such extension, the City Engineer may require SUBDIVIDER to furnish new security guaranteeing performance of this Agreement as extended in an increased amount as necessary to compensate for any increase in construction costs as determined by the City Engineer.
16. SUBDIVIDER'S Responsibilities. The SUBDIVIDER shall keep itself informed of all local, State and Federal Laws and regulations which in any manner affect those employed by it or in any way affect the performance of its obligations pursuant to this Agreement. The SUBDIVIDER shall at all times observe and comply with all such laws and regulations. The CITY, and its officers and employees, shall not be liable at law or in equity occasioned by failure of the SUBDIVIDER to comply with this section.
17. No Vesting of Rights. Performance by SUBDIVIDER of this Agreement shall not be construed to vest SUBDIVIDER'S rights with respect to any change in any zoning or building law or ordinance.
18. Notices. All notices required or provided for under this Agreement shall be in writing and delivered in person or sent by mail, postage prepaid and addressed as provided in this Section. Notice shall be effective on the date it is delivered in person, or, if mailed, on the date of deposit in the United States Mail. Notices shall be addressed as follows unless a written change of address is filed with the CITY:

Notice to CITY:**Notice to SUBDIVIDER:**

City of Temecula	
Mr. Greg Butler	
Director of Public Works/City Engineer	
41000 Main Street, P.O. Box 9033	
Temecula, California 92590-9033	

19. Severability. The provisions of this Agreement are severable. If any portion of this Agreement is held invalid by a court of competent jurisdiction, the remainder of the Agreement shall remain in full force and effect unless amended or modified by the mutual consent of the parties.

20. Captions. The captions of this Agreement are for convenience and reference only and shall not define, explain, modify, limit, exemplify, or aid in the interpretation, construction or meaning of any provisions of this Agreement.
21. Litigation or Arbitration. In the event that suit or arbitration is brought to enforce the terms of this contract, the prevailing party shall be entitled to litigation costs and reasonable attorney's fees.
22. Incorporation of Recitals. The Recitals to this Agreement are hereby incorporated into the terms of this Agreement.
23. Entire Agreement. This Agreement constitutes the entire Agreement of the parties with respect to the subject matter. All modifications, amendments, or waivers of the terms of this Agreement must be in writing and signed by the appropriate representatives of the parties. In the case of the CITY, the appropriate party shall be the City Manager.

IN WITNESS WHEREOF, this Agreement is executed by CITY, by and through its Mayor.

SUBDIVIDER*

By: _____

Name: _____

Title: _____

By: _____

Name: _____

Title: _____

(Proper Notarization of SUBDIVIDER'S signature is required and shall be attached)

* Two signatures are required for corporations unless corporate documents are provided that indicate otherwise.

CITY OF TEMECULA

Michael S. Naggar
Mayor

ATTEST:

Susan W. Jones, MMC
City Clerk

RECOMMENDED FOR APPROVAL:

Greg Butler
Director of Public Works/City Engineer

APPROVED AS TO FORM:

Peter M. Thorson
City Attorney



PUBLIC WORKS DEPARTMENT Land Development Division Subdivision Monument Bond

WHEREAS, the City of Temecula, State of California, and _____
(hereinafter designated as "Principal") have entered into an agreement whereby Principal has presented to the City for its approval a Final Subdivision Map, which Map carries the Engineer's or Surveyor's certificate that the monuments will be set on or before a specified later date, which said agreement, identified as Project _____ and dated _____, 20____
("Agreement"), and is hereby referred to and made a part hereof; and

WHEREAS, said Principal shall insure the setting of monuments and to guarantee payment to the Engineer or Surveyor for setting such monuments in said Subdivision, and as a prerequisite to the approval of said Final Subdivision Map; and

NOW, THEREFORE, we the Principal and _____ as Surety, are held and firmly bound unto the City of Temecula, California, in the penal sum of \$_____, lawful money of the United States, for the payment of such sum well and truly to be made, we bind ourselves, our heirs, successors, executors and administrators, jointly and severally.

The condition of this obligation is such that the obligation shall become null and void if the above-bounded Principal, his or its heirs, executors, administrators, successors, or assigns, shall in all things stand to, abide by, well and truly keep, and perform the covenants, conditions, and provisions in the Agreement and any alteration thereof made as therein provided, on his or their part, to be kept and performed at the time and in the manner therein specified, and in all respects according to his or their true intent and meaning, and shall indemnify and save harmless the City of Temecula, its officers, agents, and employees, as therein stipulated; otherwise, this obligation shall be and remain in full force and effect.

As a part of the obligation secured hereby and in addition to the face amount specified therefore, there shall be included costs and reasonable expenses and fees, including reasonable attorney's fees, incurred by City in successfully enforcing such obligation, all to be taxed as costs and included in any judgment rendered.

The Surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Agreement or to the work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Agreement or to the work or to the specifications. The Surety further stipulates and agrees that its obligations and liability on this bond shall be released only upon final completion and City's acceptance of the work required pursuant to this Agreement.

IN WITNESS WHEREOF, this instrument has been duly executed by the Principal and Surety
above named, on _____, 20____.

[SEAL]

[SEAL]

SURETY

By: _____
(Name)

(Title)

PRINCIPAL

By: _____
(Name)

(Title)

By: _____

(Name)

(Title)

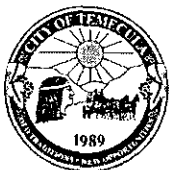
APPROVED AS TO FORM

Peter M. Thorson
City Attorney

* Two signatures are required for corporations
unless corporate documents are provided
that indicate otherwise.

APPENDIX V "SECURITY FORMS FOR ONSITE (PRIVATE) DEVELOPMENT"





PUBLIC WORKS DEPARTMENT Land Development Division

41000 Main Street * Temecula, CA 92590

* www.cityoftemecula.org *

GRADING AND EROSION & SEDIMENT CONTROL AGREEMENT

(Secured by Bond, Cash or Letter of Credit)

THIS AGREEMENT is made and entered into the _____ day of _____, 20__ by and between the City of Temecula, a Municipal Corporation of the State of California (hereinafter referred to as "CITY") and the APPLICANT.

RECITALS

- A. APPLICANT warrants and represents that the following project and contact information is true and correct:

Planning Application No. and Land Dev Permit No.:	
Name of Development:	Tract/Parcel Map No.:
Name of APPLICANT:	Lot/Parcel No.:
Site Address:	APN:
Total Amount of Security: \$_____ Amounts Posted By:	
Bond: \$_____ Cash: \$_____ Letter of Credit (LoC): \$_____	
If applicable, Name, Address, Point of Contact & Phone No. of Surety Company and Bond No.:	
Name, Address, Point of Contact and Phone No. of Issuing Bank and LoC No.:	

- B. APPLICANT has applied for a grading permit pursuant to the provisions of Title 18 of the Temecula Municipal Code (hereinafter referred to as "the Code") to perform certain improvements within the CITY, more specifically described in the grading permit referred to above and incorporated by reference.
- C. The approved plans and specifications for the work to be performed under the grading permit have been reviewed and approved by the City Engineer.
- D. The improvements outlined in the grading permit shall be performed in accordance with the approved plans, the Code, the Engineering and Construction Manual (i.e., Grading Manual), and the current City standards, guidelines and other applicable laws, ordinances and regulations as well as any and all Conditions of Approval to the satisfaction of the City Engineer.
- E. Title 18 of the Code requires the APPLICANT to post a security for performance and labor and material with the City to cover the cost of the grading and erosion & sediment control work prior to issuance of a grading permit.

- F. An estimate for the cost of the grading and erosion & sediment control work to be performed has been submitted by the APPLICANT and approved by the City Engineer. The estimated amount is stated on Page 1 of this agreement. The basis for the estimate is attached as Exhibit "A" to this Agreement.

NOW, THEREFORE, it is agreed between the CITY and the APPLICANT as follows:

1. APPLICANT's Obligation. APPLICANT agrees to:
 - a. Complete all improvements required by this Agreement by the time established in Paragraph 8 of this Agreement and at the APPLICANT's own expense.
 - b. Perform and maintain any and all protective devices shown on the erosion and sediment control plan in order to protect all adjacent properties from damage or alterations from drainage or erosion which may occur as a result of any work performed on the site.
 - c. Furnish all labor, equipment and material necessary to perform and complete all required improvements in accordance with the approved plans at APPLICANT's own expense.
 - d. Give good and adequate warning, at all times, and to protect the traveling public of each and every dangerous condition caused by the construction of the improvements.
 - e. Be responsible for eliminating or correcting any defect or dangerous condition caused by the design or construction. It is the intent of this section that the APPLICANT, its agents, employees, or contractor's shall be responsible for all liability for design and construction of the improvements done pursuant to the grading permit and this Agreement and that CITY shall not be liable for any act or omission in approving, reviewing, or correcting any plans or specifications or in approving, reviewing or inspecting any construction related activity.

2. Security. The APPLICANT agrees to maintain in place said security in the amounts shown for faithful performance and labor and material for the terms and conditions of this Agreement and any time extensions granted by the City Engineer. APPLICANT further agrees that if, in the opinion of the City Engineer, the surety on the bond and/or letter of credit or the amount of said bond and/or letter of credit becomes insufficient, APPLICANT agrees to renew, increase, or both, each and every bond and/or letter of credit with good and sufficient sureties or amounts within ten (10) days after being notified by the City Engineer. Notwithstanding any other provision herein, if APPLICANT fails to take such action, as is necessary to comply with said notice, he shall be in default of this Agreement unless all required improvements are completed within ninety (90) days of the date on which the City Engineer notified the APPLICANT of the insufficiency of the sureties or the amount of the bond and/or letter of credit, or both.

3. Release of Securities.
 Security, required by this Agreement, given to guarantee faithful performance and labor and material for the improvements authorized pursuant to the grading permit and this Agreement shall be released upon acceptance of the work by the City Engineer, and subject to the following provisions:
 - a. Upon written request by APPLICANT, the City Engineer may release up to fifty percent (50%) of the securities once the site has been cleared for building permit issuance. The remaining balance of the securities shall not be authorized for release or reduction unless a new construction security worksheet is provided with an estimate of the remaining work needed to secure the site from erosion and sediment discharges.

- b. The complete securities shall be released upon issuance of a certificate of occupancy and/or final inspection; however, the CITY may, if necessary, retain an amount sufficient to cover costs, expenses and fees, including attorney's fees.

Any statute of limitations with respect to the obligations of APPLICANT shall not apply to any bonds or other forms of security provided pursuant to this Agreement. The Surety's liability under any bonds or other forms of security provided pursuant to this Agreement shall be released only upon final completion and CITY's acceptance of the work required pursuant to this Agreement. The expiration of any statute of limitations with respect to APPLICANT shall not bar an action against the Surety under the bond or any other form of security provided pursuant to this Agreement.

4. Right of Entry, Inspection and Approval. APPLICANT shall at all times allow the CITY, or its authorized agents, to enter upon the project site for the sole purpose of inspecting the site in accordance with the conditions and requirements of the grading permit and to accomplish any emergency or erosion control work. Upon completion of the work, APPLICANT shall request a final inspection by the City Engineer. If the City Engineer determines that the work has been completed in accordance with this Agreement, he shall certify completion of the work. APPLICANT shall bear all costs of inspection and certification.
5. Default of the APPLICANT. In the event the APPLICANT, its agents, employees, or contractor's fails to comply or perform with the terms and conditions of the grading permit and this Agreement within the specified time, or within any extensions of time granted therein, APPLICANT shall be declared in default of this Agreement and notice in writing of such default shall be served upon the APPLICANT by the City Engineer. The City Engineer shall have the power to terminate all rights of the APPLICANT because of neglect or default. The foregoing provisions of this section shall be in addition to any and all rights and remedies available to the CITY under law or in equity.

In the event the CITY is required to complete all or part of the improvements as set forth in the grading permit or this Agreement, the Surety shall comply with any lawful order of the City Engineer requiring the work authorized and affected by the grading permit to be completed and that the premises covered by the permit be made safe to life and property to the satisfaction of the City Engineer, and in such event such Surety fails to promptly do so, the Surety shall pay the CITY all costs and expenses incurred by the CITY in completing the work authorized by the grading permit making the premises safe to the satisfaction of the City Engineer. The APPLICANT also hereby grants to the CITY and to any agent or employee of the CITY, the irrevocable permission to enter upon the lands of the above referenced project site for the purpose of completing the improvements. This permission shall terminate in the event that the APPLICANT has completed the work within the time specified or any extension of time thereof granted by the City Engineer.

6. Indemnity/Hold Harmless. Neither the City, any officer, employee nor agent, thereof, shall be responsible for any damage or liability occurring by reason of anything done or omitted to be done by the APPLICANT under or in connection with any work permitted under said grading permit. It is also understood and agreed that APPLICANT shall fully indemnify, defend and hold CITY harmless from any liability imposed for injury occurring by reason of anything done or omitted to be done by APPLICANT under or in connection with any work permitted under said grading permit. Said indemnification and agreement to defend and hold harmless shall extend to injuries to persons and damages to or taking of property resulting from the design or construction provided herein, and in addition, to adjacent properties

and improvements located thereon as a consequence of the diversion of waters from the design or construction of drainage systems, private streets, grading and other development improvements.

7. Sale or Disposition of Property. Sale or other disposition of the property will not relieve the APPLICANT from the obligations set forth in this Agreement. If APPLICANT sells the property to any other person, the APPLICANT may request a novation of this Agreement and a substitution of security. Upon approval of the novation and substitution of securities, the APPLICANT may request a release or reduction of the securities required by this Agreement. Nothing in the novation shall relieve APPLICANT of the obligations under Paragraph 6 for the work done by the APPLICANT.

8. Time for Completion of Work/Time Extensions. APPLICANT shall complete all work required by the grading permit and this Agreement within six (6) months from the date of permit issuance. It is further agreed by and between the parties hereto, including the Surety on the bond securing this Agreement that, in the event it is deemed necessary to extend the time of completion for the work contemplated to be done under this Agreement, extensions of time may be granted by the City Engineer in accordance with Section 18.06.160 of the Code, such extensions shall in no way affect the validity of this Agreement or release the Surety on said bond.

9. Notices. All notices required or permitted to be given pursuant to this Agreement shall be in writing and delivered by mail, postage prepaid and addressed as follows unless a written change of address is filed with the CITY:

Notice to CITY:

Notice to APPLICANT:

City of Temecula	
Greg Butler, Director of Public Works/City Engineer	
41000 Main Street	
Temecula, California 92590	

Notice to BANK (for Letter of Credit):

Notice to SURETY (for bond):

10. Severability. It is understood and agreed by the parties hereto that if any part, term or provision of this Agreement is by the courts held to be unlawful and void, the validity of the remaining portions shall not be affected and the rights and obligations of the parties shall be construed and enforced as the Agreement did not contain the particular part, term of provision held to be invalid.

11. Litigation or Arbitration. In the event that suit or arbitration is brought to enforce the terms of this contract, the prevailing party shall be entitled to litigation costs and reasonable attorneys' fees.

12. Incorporation of Recitals. The Recitals to this agreement are hereby incorporated into the terms of this Agreement.

13. Entire Agreement. This Agreement constitutes the entire agreement of the parties with respect to the subject matter. All modification, amendments, or waivers of the terms of this agreement must be in writing and signed by the appropriate representatives of the parties.

IN WITNESS WHEREOF, this Agreement has been duly executed by the CITY and the APPLICANT above named on _____, 20__.

(ATTACH NOTARY ACKNOWLEDGEMENT)

APPLICANT*

Name: _____

Title: _____

Name: _____

Title: _____

CITY OF TEMECULA

Greg Butler
Director of Public Works/City Engineer

ATTEST:

Susan W. Jones, MMC
City Clerk

APPROVED AS TO FORM:

Peter M. Thorson
City Attorney

* Two signatures are required for corporations unless corporate documents are provided that indicates otherwise.



**PUBLIC WORKS DEPARTMENT
Land Development Division
Grading and Erosion & Sediment Control Bond**

WHEREAS, the City of Temecula, State of California and _____
(hereinafter designated as "Principal") have entered into an agreement entitled "Grading and
Erosion & Sediment Control Agreement" whereby Principal agrees to install and complete
certain improvements with approved plans and specifications, which said agreement, dated
_____, 20____ and identified as Project _____, is hereby
referred to and made a part hereof; and

WHEREAS, Principal is required under the terms of the agreement to furnish a corporate
surety bond for the faithful performance of the agreement;

NOW, THEREFORE, we the Principal and _____ as Surety, are
held and firmly bound unto the City of Temecula, California, in the penal sum of \$_____,
lawful money of the United States, for the payment of such sum
will and truly to be made, we bind ourselves, our heirs, successors, executors and administrators,
jointly and severally.

The condition of this obligation is such that the obligation shall become null and void if the above-
bounded Principal, his or its heirs, executors, administrators, successors, or assigns, shall in all things
stand to, abide by, well and truly keep, and perform the covenants, conditions, and provisions in the
agreement and any alteration thereof made as therein provided, on his or their part, to be kept and
performed at the time and in the manner therein specified, and in all respects according to his or their
true intent and meaning, and shall indemnify and save harmless the City of Temecula, its officers, agents,
and employees, as therein stipulated; otherwise, this obligation shall be and remain in full force and
effect.

As a part of the obligation secured hereby and in addition to the face amount specified
therefore, there shall be included costs and reasonable expenses and fees, including reasonable
attorney's fees, incurred by City in successfully enforcing such obligation, all to be taxed as costs
and included in any judgment rendered.

The Surety hereby stipulates and agrees that no change, extension of time, alteration or
addition to the terms of the agreement or to the work to be performed thereunder or the
specifications accompanying the same shall in any way affect its obligations on this bond, and it
does hereby waive notice of any such change, extension of time, alteration or addition to the terms
of the agreement or to the work or to the specifications.

IN WITNESS WHEREOF, this instrument has been duly executed by the Principal and Surety above named, on _____, 20____.

[SEAL]

[SEAL]

SURETY

By: _____

(Name)

(Title)

PRINCIPAL ✱

(Name)

(Title)

By: _____

(Name)

(Title)

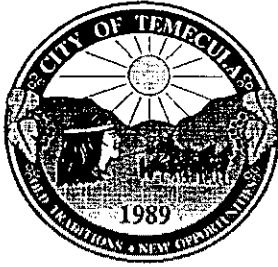
* Two signatures are required for corporations unless corporate documents are provided that indicate otherwise.

APPROVED AS TO FORM:

Peter M. Thorson
City Attorney

**APPENDIX W “PROCEDURE FOR RELEASE OF SECURITY FOR PUBLIC
IMPROVEMENTS”**

W



DEPARTMENT OF PUBLIC WORKS LAND DEVELOPMENT DIVISION

PROCEDURE FOR RELEASE OF SECURITY FOR PUBLIC IMPROVEMENTS

The purpose of this document is to establish procedures and guidelines for the release of securities posted to cover the cost of public improvements that subdividers are required to construct. The release of securities shall be pursuant to the requirements of the Subdivision Map Act (Government Code Section 66499.7).

All inquiries regarding the release of bonds shall be processed through the Permits Engineer of the Department of Public Works in the Land Development Division.

Release of Security in "Bond" Form:

1. **Faithful Performance Bond.** The Faithful Performance bond ensures performance of the improvements. This bond is in the amount of **100%** of the estimated cost of the improvements. The security furnished by the subdivider may be released in full or in part in the following manner:
 - A. **Full Release.** The performance bond shall be released upon final completion and acceptance of the improvements, subject to the provisions noted below:
 - (1) Per the State Government Code, once the work is **100% complete** (no partial reductions prior), the subdivider may request for the release of security. The subdivider shall provide the City Engineer a written notice that includes, but is not limited to: a statement that the project is 100% complete, a list of the completed work and a formal request to release the security.
 - (2) Upon receipt of the written notice, the City Engineer shall have 45 days to review the notice, the list of completed work, the site and confirm that all work is complete.
 - a. If the City deems the work complete:
 - i. The City will confirm that utility (sewer and water) agencies have cleared and accepted their systems, if applicable; and if so, the City Engineer will deem the project acceptable and reduce the performance security by refunding **90%** of the security to the subdivider.
 - ii. The City Engineer will hold the remaining 10% of the security for one year (as a warranty/maintenance security), following acceptance by the City, against defective work or labor done or defective materials furnished, etc.
 - iii. After the one year period, the subdivider shall provide a letter to the City Engineer requesting for a final inspection of the improvements prior to release of the final 10% security.
 - b. If the City deems the work incomplete:
 - i. The subdivider shall pay associated fees for premature inspection requests per City resolution(s). Within the 45 day review period, the City Engineer will provide a punchlist of incomplete items to the subdivider. All outstanding punchlist items shall be completed to the satisfaction of the City Engineer prior to re-scheduling another site inspection.

- ii. The subdivider shall complete all outstanding punch list items and start the process again by notifying the City Engineer that all required work has been completed.
- B. Partial Release. In accordance with the requirements of Government Code Section 66499.7, the City Engineer shall allow a partial release of the faithful performance securities upon partial performance of the work or acceptance of the work as it progresses, pursuant to the following procedures:
- (1) A reduction in the performance security shall not be deemed to be an acceptance by the City Engineer of the improvements and the risk of loss and/or damage to the improvements. The obligation to maintain the improvements shall remain with the subdivider until all improvements have been accepted by City Council and all other required improvements have been fully completed.
 - (2) If partial reduction of performance security is granted, the subdivider shall be responsible to continue to construct the improvements until all remaining items are accepted by City Council.
 - (3) Subdivider shall have only **one opportunity** to engage in the process of partial release of performance securities between the start of work and completion and acceptance of all work.
 - (4) A partial release of performance security shall be allowed only when, at least, 80% of the total work has been completed. The process allowing for a partial release of performance security shall occur when the cost estimate of the remaining work does not exceed 20% of the total original performance security.
 - (5) If the subdivider is confident that 80% or more of the total work is completed, he shall provide the City a written notice that includes, but is not limited to: a statement that the project is more than 80% complete, a list of the completed work along with a cost estimate showing the completed work as well as the remaining work (which should not exceed 20% of the total original performance security) and a formal request for partial release of security.
 - (6) Upon receipt of the written notice, the City will have 45 days to review, comment or approve the completion of the work.
 - a. If the City deems 80% (or more) of the work complete:
 - i. The City will approve the cost estimates and notify the subdivider that at least 80% of the improvements have been found to be complete.
 - ii. The City will then schedule for City Council the partial release of security. Upon City Council approval, the City can release all performance security except for security in an amount up to 200% of the cost estimate of the remaining work.
 - iii. All remaining work shall be completed prior to the City releasing the remaining performance security.
 - iv. The release of any remaining performance security shall be scheduled for City Council for acceptance of improvements and release of any remaining performance security.
 - b. If the City deems 79% (or less) of the work complete:
 - i. The subdivider has not met the criteria to be eligible for a partial reduction. The City will provide the subdivider a punchlist of all remaining work to be completed as well as a letter stating that he has exhausted his one opportunity to engage in the process of a partial release of security.
 - ii. The subdivider shall complete all remaining work; and when ready, shall formally request for a full release of security based on 100% completion of improvements.
- C. Substitution Bonds. Substitution bonds may be used as a replacement for the performance security, subject to City approval. If substitution bonds are allowed, the release shall not be effective unless and until the City Engineer receives and approves that form of replacement security.
- D. Warranty. No security given for the guarantee or warranty of work shall be released until the expiration of the warranty period and until all claims filed during the warranty period have been settled. Warranty periods shall not commence until final acceptance of all work by City Council.

E. Reasonable Expenses and Fees. The City Engineer may retain, from any security released, an amount sufficient to cover costs and reasonable expenses and fees (including reasonable attorney fees) incurred by the City in successfully enforcing the obligation secured.

2. Labor and Materials Bond. The Labor and Materials bond secures payment to any contractor, subcontractor, persons renting equipment or furnishing labor materials for the improvements required to be constructed or installed. This bond, which is in the amount of **50%** of the estimated cost of the improvements, shall be released at least **nine months** after completion and acceptance of the improvements (based on the required periods for claims of lien and stop payment notices).

A. Full Release. This section is pursuant to Article 2, commencing with Section 8412, of Chapter 4 of Title 2 of Part 6 of Division 4 of the Civil Code.

(1) Per the Subdivision Map Act (Government Code Section 66499.7), within 45 days following the expiration of time in which claims of liens are required to be recorded and acceptance of improvements, this security shall be reduced to an amount equal to the total claimed (by all claimants for whom liens have been filed and of which notice has been given to the legislative body) plus an amount reasonably determined by the City Engineer to be required to ensure the performance of any other obligations secured by the security. The balance of the security shall be released upon the settlement of all claims and obligations for which the security was given.

(2) Claims of Lien. Section 8412 of the Civil Code currently provides that such liens must be recorded within:

a. **90 days** after completion of the improvements if no notice of completion (NOC) or cessation has been recorded; or

b. **60 days** after recordation of the NOC or a notice of cessation

(3) Stop Payment Notices. The timeline of a stop payment notice shall also be taken into account. Section 9352 of the Civil Code identifies that a stop payment notice shall comply with the requirements of Chapter 2, commencing with Section 8100, of Title 1. Section 9558 of the Civil Code identifies that a claimant may commence an action to enforce the liability on the bond at any time after the claimant ceases to provide work, but not later than **six months** after the period in which a stop payment notice may be given. Section 9356 states that a stop payment notice is not effective unless given before the expiration of:

a. **90 days** after cessation or completion, if no NOC, acceptance or cessation has been recorded; or

b. **30 days** after the recordation of the NOC, acceptance or cessation

B. Partial Release. No partial release of the Labor and Materials bond shall be allowed.

C. Claims/Stop Payment Notices. If no claims have been recorded (during the time within which claims of lien are required to be recorded) or no stop payment notices have been given under Civil Code sections 9356 and 9558, the security shall be released in full.

3. Subdivision Monument Bond. The monument bond ensures proper setting of subdivision monumentation. This bond, which is in the amount of **100%** of the estimated cost of setting subdivision monuments, shall be released upon final completion and acceptance of installation of the subdivision monumentation.

A. Full Release. The subdivider shall notify the City Engineer in writing that the monuments have been installed pursuant to the Subdivision Map Act and shall submit all required survey documents (centerline ties, etc.). Upon receipt of said notification, the City Engineer shall verify that all required monumentation has been set. If the setting of the monuments is found to be acceptable, the City Engineer shall release the monument bond accordingly. If not, the monument bond shall not be released until the final completion and acceptance of the monumentation is achieved.

B. Partial Release. No partial release of the monument bond shall be allowed.

Release of Security in "Cash/Certificate of Deposit and Letter of Credit" Form:

1. The timeline noted in releasing security in bond form shall also be applicable to the release of securities in cash, certificate of deposit and/or letter of credit.
 - A. Cash Deposit/Certificates of Deposit. A cash deposit or Certificates of Deposit may be acceptable in lieu of a bond. The Finance Department is the lead in releasing cash and Certificates of Deposits.
 - B. Letter of Credit. A letter of credit may be acceptable in lieu of a bond. The Finance Department and City Clerk are the leads in communications with the issuing banks and in releasing this instrument of credit.